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Big Business.
Why won't it fight back?**



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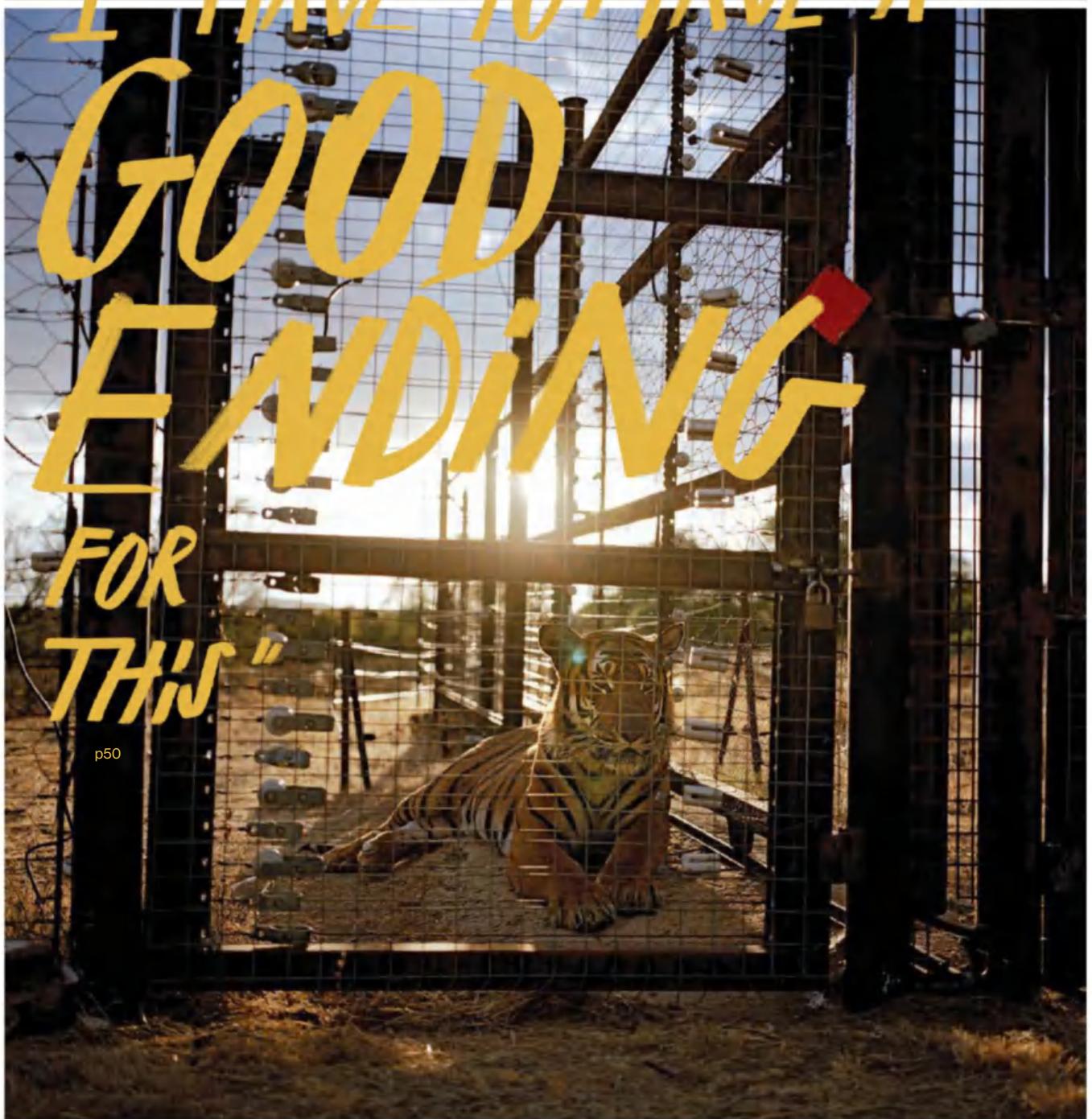
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Work on purpose

'I HAVE TO HAVE A GOOD FEADING FOR THIS'

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"It's a great sport but a very difficult business model"

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"You left Puerto Rico, your island paradise, to come here, and now you're going to support the party that screwed you?"

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"Where else in medicine can you, multiple times a day, change a woman's life in five minutes?"

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1 "The cover is about the rise in negative sentiment against Big Business and what that means for it."

"Who's saying things against Big Business?"

"Just about every presidential candidate and the people who support them. So pretty much everyone."

"It's hard to hear the cries of unrest through the thick glass on our floor-to-ceiling windows overlooking the city."

"We could be considered a big business, yes."

"What if the word 'business' in our logo was what people were attacking?"



2 "What is that dog doing?"

"He's peeing on 'business.' Not sure if we can find a dog that can pee on cue. We're going to have to shoot the legs of the dog and hire a CGI artist to add the pee."



3 "(to CGI artist) "Hello, we have an urgent assignment. We need a realistic pee stream to be added to a dog with his leg up. It should be a sturdy stream and have some splashing when it hits its target."

(CGI artist hangs up)

"I'll call him back. This happens more often than you'd think."





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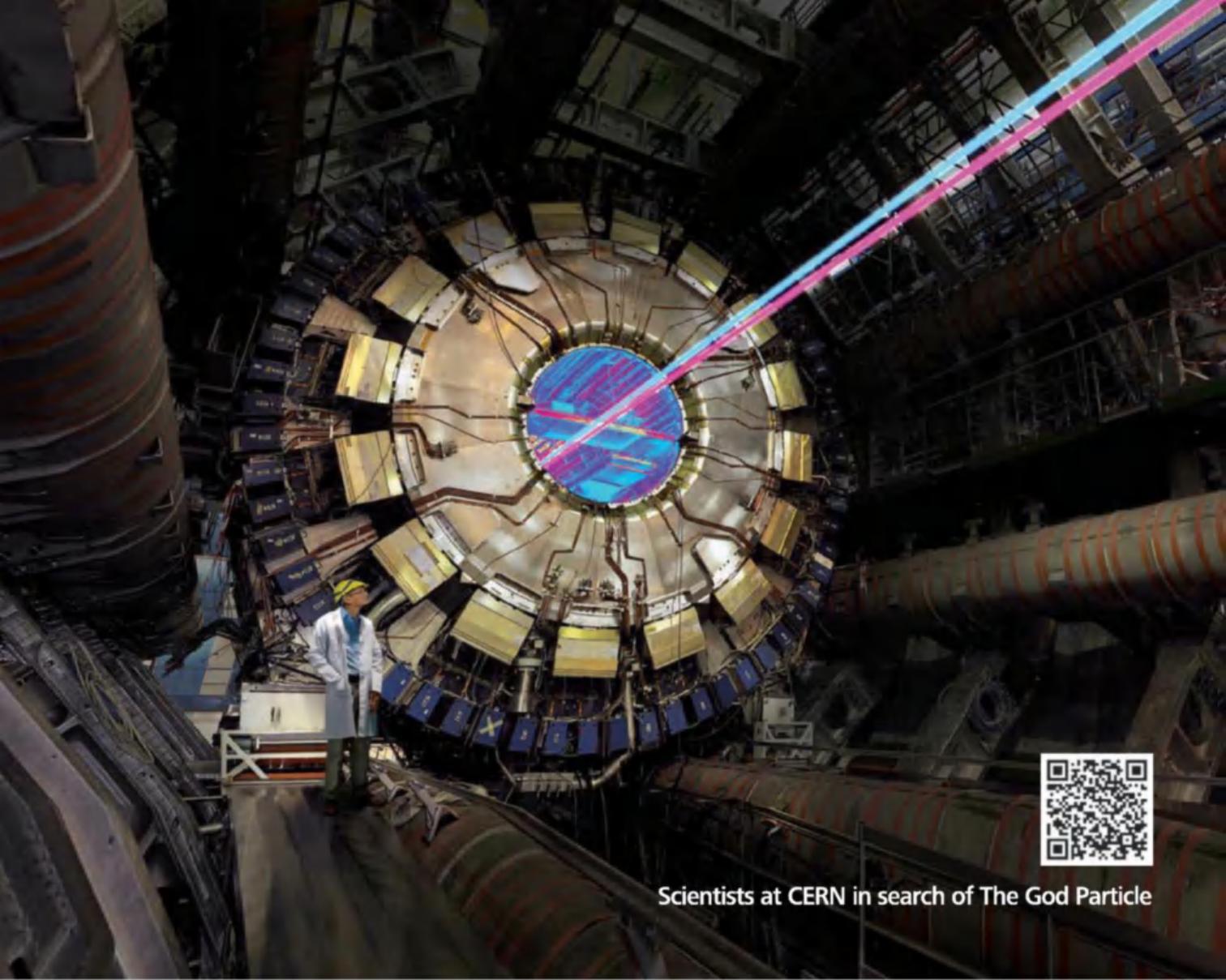
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Opening Remarks

Open Season On Big Business

By Peter Coy

This is a different kind of election year, full of contempt for Big Business. Billionaire flamethrower Donald Trump, who leads the Republican field, has gone after Ford Motor, Kraft Foods, and Apple, among others, for making things outside the U.S. Ted Cruz presents himself as the nemesis of corporate welfare and crony capitalism. And democratic socialist Bernie Sanders has built an entire campaign around the refrain that Wall Street is guilty of “greed, fraud, dishonesty, and arrogance.”

You might have expected business to mount a vigorous defense. But corporate America has responded to the charges with murmurs. In this gladiators’ match, one side simply hasn’t shown up. Many chief executive officers believe that after the election is over and

have a hunch that what runs in the family is you get a little practical if you get the job,” he told Bloomberg TV.

Up until now, the hunker-down strategy has worked remarkably well. Considering the vitriol directed toward Big Business on the campaign trail, it’s scored one victory after another in Washington. Last year, Congress gave President Obama the authority he sought to put trade deals on a “fast track,” increasing the chances for ratification of the TPP. It made the research and development tax credit permanent. It suspended the debt limit until 2017, removing the risk of a default crisis. It extended a tax break on capital spending through 2019. And it passed a five-year, \$305 billion transportation bill that Big Business had lobbied for. Attached to the bill was a renewal of the charter of the Export-Import Bank, which Cruz and others had derided as crony capitalism.

That last victory was especially sweet. Three Republican senators who were

***The big guys
always want freebies.***
—John Kasich

***I do not accept the belief that
the United States of America and our
government can't stand up to
the rip-offs of the pharmaceutical
industry.*** —Hillary Clinton

***I'll never eat another
Oreo again. Ever. Ever.***
—Donald Trump

the noise of the campaign dies down, it will be business as usual for business. For now, they are turning the other cheek. When Trump ripped Ford for its plans to build a big factory in Mexico, the company’s CEO, Mark Fields, wrote Trump a pleasant note explaining that the carmaker was also adding jobs in the U.S. JPMorgan Chase CEO Jamie Dimon, who’s known for flashes of anger, calmly told *CNNMoney* in November that he thinks he could talk Sanders out of breaking up the big banks. “I don’t think Bernie’s going to win,” he said. “I’m not that worried.”

The nonchalance can come across as patronizing: Thomas Donohue, president of the U.S. Chamber of Commerce, dismisses as a campaign tactic Hillary Clinton’s opposition to the 12-nation Trans-Pacific Partnership (TPP) trade deal in its current form. “If she were to get nominated, if she were to be elected, I

campaigning for president and had their fingers on the public’s furious pulse—Cruz, Marco Rubio, and Rand Paul—voted nay. The bill sailed through the Senate on Dec. 3 despite them, 83 to 16. “That was a bruising battle that we were able to punch through,” says Bill Miller, the top lobbyist of the Business Roundtable, whose chief executives run companies with combined annual revenue of more than \$7 trillion.

So far, the voters’ fury seems as harmless as waves breaking on a jetty. “Over the last 12 months, the manufacturing community has been extraordinarily successful in implementing its legislative priorities,” says Aric Newhouse, the chief lobbyist of the National Association of Manufacturers, which represents big and small manufacturers.

That could soon change. One good year on the legislative front is just one good year. It could even backfire. Each

Can corporations continue to get their way in Washington if the public—and presidential wannabes—line up against them?

surprising legislative victory that business chalks up is further stoking the resentment of voters who detest the influence of corporations on politics. After Congress passed fast-track last summer, the AFL-CIO put out a statement saying “global enterprises...must no longer be the architects of U.S. trade policy.”

Anti-establishment candidates are surging in the polls because voters sense that they’re just crazy enough to blow things up. Trump, the populist, scares business because he promises to restrict immigration and put up tariff walls; Cruz, the free-market purist, frightens it because

they would drive up the national debt in the absence of either huge spending reductions or white-hot economic growth, both of which are unlikely. What Big Business really wants is corporate tax reform, but that keeps getting sidelined by crowd-pleasing proposals for steep cuts in personal tax rates. “Some candidates who have been most detailed in what they would do are now on the sidelines, and those who have said the least seem to be in the strongest position,” complains John Engler, the former Republican governor of Michigan who is president of the Business Roundtable.

consumers hundreds of billions more in higher prices. “There’s a tremendous amount of frustration on the right and the left,” says Levi Russell, director of public affairs for Americans for Prosperity, which is backed by libertarian billionaires Charles and David Koch.

Business lobbyists know they have a problem. “Economic populist rhetoric” is heightening uncertainty, which “can create a drag on jobs and growth,” Chamber of Commerce spokesman Myron Brilliant wrote in an e-mail. Says Engler: “We need to end this class warfare and get busy going back to a fundamental economic rule, that a rising tide really will lift all boats.”

Most work done by lobbyists happens

The business model of Wall Street is fraud. It's fraud. I believe that corruption is rampant.
—Bernie Sanders

One of the biggest lies in politics is the lie that the Republicans are the party of Big Business.
—Ted Cruz

Too often, Republicans allow themselves to be a party that's not for growth but that's for Big Business. —Marco Rubio

he wants to kill the Ex-Im Bank and hem in the Federal Reserve. Even the more mainstream candidates, such as Rubio and Clinton, have appealed to voters with business-unfriendly positions that will be hard to walk back if they reach the White House. Under pressure from Sanders, Clinton came out last year against the Keystone XL pipeline (page 29), which the Chamber of Commerce called a “bellwether indicator of whether America will be open for business.” And Rubio has been backing away from his previous agreement with the Big Business lobby on the TPP and immigration reform.

Cutting taxes would seem to be one issue where Big Business and the leading Republicans are on the same page. Not really, though. The cuts promised by Trump, Cruz, and Rubio are so big that

Fairly or not, Big Business is taking heat for the stagnation of living standards and the widening gap between rich and poor. Corporate leaders are earning high operating profits but spending them on stock buybacks and higher dividends, which enrich shareholders, rather than on capital investment. Companies say high taxes and regulatory uncertainty are to blame for their reluctance to expand, but the practical effect of underinvestment in plants, equipment, and software is to suppress productivity and job growth, harming the middle class. Meanwhile, the libertarian Cato Institute is gaining traction with its claim that crony capitalism costs taxpayers \$100 billion a year and

behind the scenes. “Lobbyists, like mushrooms, thrive in low light,” says Richard Hasen, a law professor at the University of California at Irvine and author of a new book, *Plutocrats United*. The last thing CEOs want to do is get into a Twitter war with Trump or provide Sanders with red meat for his next denunciation of bankers. They are diplomats by nature who answer to multiple bosses: their boards, activist shareholders, customers, employees, and government.

Few chief executives will stick their necks out the way Apple CEO Tim Cook has in defying the government’s demand for access to the contents of the iPhone of one of the San Bernardino killers. ►

Opening Remarks

◆ Fewer still go out of their way to court controversy in the style of Trump. It's telling that the only prominent businessperson to have endorsed Trump so far is Carl Icahn, another brash and independent billionaire.

How long can an under-the-radar strategy by corporations continue to be effective? The bruising fight for renewal of the Export-Import Bank demonstrates both the potential and the limitations of how the business lobby operates. The Chamber of Commerce and the Business Roundtable, among others, pushed hard for reviving the Ex-Im Bank, which gives loans and loan guarantees to aid U.S. exporters. Boeing Chairman Jim McNerney, who is active in both groups, quietly warned that Boeing might have to move work abroad if it didn't have Ex-Im's help. That alarmed moderate members of Congress, who were already

Parliamentary finesse worked this time. It also helped that John Boehner, who resigned as House speaker on Oct. 29, had stopped trying to appease his party's right wing. In the long run, though, Big Business will struggle to win if it's perceived as just another special interest that's skilled in working the system.

One thing working against big businesses is that they're, you know, big. They don't get credit for being small businesses that succeeded. Small business is twice as popular as Big Business, according to a survey by Pew Research Center conducted last fall. In a Gallup Poll in

Great Depression. Economists and politicians worried then that the U.S. would lapse back into a slump when war spending ended. Top business executives responded in 1942 by forming the nonpartisan Committee for Economic Development. It built support for the Bretton Woods agreement of 1944, which led to the formation of the International Monetary Fund and the World Bank. It was also involved in the Marshall Plan of 1948, which helped rebuild Europe. It went on to champion other causes such as free trade, pre-K education, and campaign-finance reform.

Once again a large segment of the

I have refused to lick the boots of billionaires and beg them for their resources.

—Ben Carson

We need to clean house, and it must start by eliminating the crony capitalism that is pervasive throughout the federal government.

—Jeb Bush

having doubts about letting the bank die.

It was Stephen Fincher, a farmer and gospel singer from Frog Jump, Tenn., serving his third term as a House Republican, who made the key move that saved the Ex-Im Bank. Jeb Hensarling of Texas, who called the bank "corporate welfare," had the renewal bottled up in the Financial Services Committee he chairs. "We tried and tried to work with Chairman Hensarling, and in the end he refused to move my bill," Fincher recalled in February in a statement released by his office. On Oct. 26 an exasperated Fincher used a rare parliamentary device called a discharge petition to bring the renewal legislation directly to the House floor, where it won approval. That may go down as the signature legislative achievement of Fincher, who announced on Feb. 1 that at the conclusion of his term he "will be returning to Frog Jump."

The last thing CEOs want to do is get into a Twitter war with Donald Trump

January, 63 percent of respondents said they were dissatisfied with "the size and influence of major corporations." We're a long way from 1925, when President Calvin Coolidge could say that "the chief business of the American people is business." Now, it seems, the chief business of the American people is complaining about business.

Dave Camp, a Michigan Republican who was chairman of the House's tax-setting Committee on Ways and Means until early last year, says business needs to do a better job of making clear that its priorities—freer trade, less regulation, etc.—will benefit the public. That's not easy to convey to angry voters, concedes Camp, now a senior policy adviser to accounting and consulting firm PwC. In the private sector, he says, "you realize that a lot of the things that are nuanced victories in Washington don't really translate as you get out and around. It takes a lot to move the needle on public opinion."

There are similarities between today and the years immediately after the

public is questioning the vitality of the American system, whether it's Trump voters glomming on to "we don't win anymore" or Sanders supporters cheering his declaration that Wall Street's business model is fraud. Says Joseph Minarik, the research director of the Committee for Economic Development: "This is almost the first echo of the attitudes that were in place in the late years of the Great Depression." The difference is that business is less outwardly focused this time around. The Committee for Economic Development is diminished; since last year it's been an arm of the Conference Board. "Very few business leaders believe they have the imprimatur from their boards to engage in public-issue-type activities these days," Minarik says. For now, the people with the pitchforks are controlling the narrative. As Cruz said on Feb. 20 after the Republican primary in South Carolina, "The screaming you hear now from across the Potomac is the Washington cartel in full terror that the conservative grass roots are rising up." **B**

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Getting Europe and The U.S. to 'Yes'

A trans-Atlantic trade pact is important to both parties. So enough with the protracted talks



If the U.S. and Europe are to agree on an historic trade deal this year, while President Barack Obama is still in office and before France and Germany are caught up in their respective 2017 elections, the talks that began on Feb. 22 in Brussels need to be fruitful. That means they must address one of the main points of contention: how investors and governments settle disputes.

The European Union has put forth a plan to create a special court to settle investor disputes. Such a court, however, is unworkable, both practically and politically: Its legality within the EU is questionable. Furthermore, the chances that the U.S. Congress would allow the court to have authority over the U.S. are slim to none.

More important, a new court isn't necessary, because a perfectly good model for settling disputes is laid out in the Trans-Pacific Partnership, the trade deal that was concluded last year. Among other changes, the TPP enshrined more transparency and put the burden of proof on companies (which ought to satisfy European concerns that multinationals will use the procedures to challenge national policy).

Negotiators should waste no time settling this issue so they can move on to other disputed areas, such as agricultural tariffs, food safety, and regulatory standards.

A robust deal this year would be a significant achievement. Yes, the negotiations have seemed endless (the talks in Brussels are Round 12), and they've grown increasingly contentious. But the potential benefits for both sides are too great to let this opportunity pass.

The trans-Atlantic economy accounts for about half of global gross domestic product. Europe and the U.S. are each other's primary source of, and destination for, foreign direct investment. The pact at issue, the Transatlantic Trade and Investment Partnership, would create the world's largest free-trade zone and result in several million export-dependent

jobs. The plan to reduce tariff and nontariff trade barriers is estimated to boost the GDPs of the EU and the U.S. about half a percentage point.

The longer the talks drag out, the greater the chances they will be derailed. Protectionist critics in Europe, unnerved by an immigration crisis, slow growth, and stagnating productivity, are increasingly vocal. And while the EU has done a poor job selling the benefits of an agreement, populist parties have engaged in effective scaremongering.

At a time when insecurity—economic and otherwise—threatens international cooperation generally, a more robust trans-Atlantic economy can reinforce Western values, bolster strategic interests, and serve as an example for other parts of the world.

The Limits of Obama's Cuba Trip

His visit may be historic, but change won't happen unless Raúl Castro will allow it to occur

With all due respect to Mick and Keith, a Rolling Stones concert is no longer a life-changing experience. Nor is a visit from a U.S. president, necessarily. Change in Cuba—where these two events are scheduled for successive days in March—depends most of all on the Cuban government. President Obama's trip to Cuba on March 21 is not, as its critics contend, a vote of confidence in President Raúl Castro's government. It's simply an opportunity for Obama to acknowledge both the successes and the limits of U.S. policy.

More than a year after the normalization of ties began between the U.S. and Cuba, there are tangible signs of progress. Commercial flights and ferry service from the U.S. will soon resume, bringing more American travelers to Cuba. U.S. cellular companies provide service on the island, and Internet access has improved. The first U.S. factory on Cuban soil in more than half a century will soon open. And serious talks have begun on issues such as investor protections, telecom regulations, and environmental protection.

Like the hundreds of millions more dollars in U.S. remittances lifting the fortunes of ordinary Cubans and fueling small businesses, these developments can have a powerful cumulative effect. For one thing, they raise popular expectations and put the onus for change squarely on Cuba's government. Moreover, even with the embargo intact, a visit from a popular American president may help convince the Cuban people that the U.S. is no enemy.

So you can expect an eloquent speech or two. But soaring rhetoric about free expression is meaningless without support for those who depend on it to criticize the Castro regime, which has increased its persecution of them. Obama can help his credibility by recognizing that, for most Cubans, daily life is much as it was. **B**



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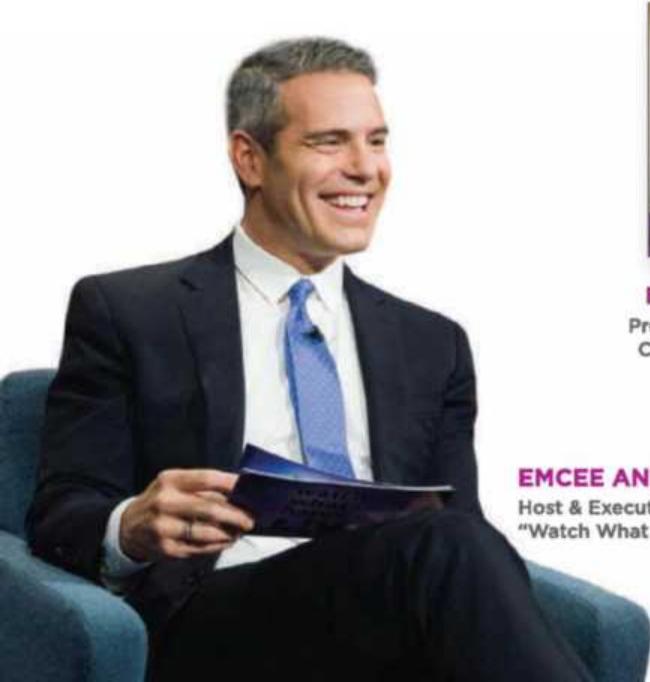
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► The fight to keep Britain in the EU just got a lot harder

► “While parents worried...we were banging on about Europe”

Not quite a year ago, British Prime Minister David Cameron achieved the impossible and won a majority in Parliament. It's a small majority, but the internal battles of the Labour opposition have left the impression that Cameron is dominant in British politics. So it's surprising that he might have to resign in June. If he does, he'll have been forced out not by a rival or by a scandal, but by the misfiring of a three-year-old gambit of his own making.

Europe has been the issue that's caused the Tories the most difficulty ever since a fight over the extent of

British integration into the European Union helped bring about the fall of Margaret Thatcher in 1990. Successive leaders were either chosen for their purity on the issue-less Europe, which was Thatcher's stance—or undermined for their lack of it. By 2005, when Cameron took the job, it was impossible to be elected leader without making at least some noise about distancing Britain from the EU.

Amid this ideological debate, the public turned its back on the Tories. It wasn't, Cameron argued in a 2006 speech, a coincidence. “While parents

worried about child care, getting the kids to school, balancing work and family life, we were banging on about Europe,” he told his party. For the next four years, as party leader he focused the Conservatives on domestic issues, with enough success that he became prime minister in 2010, ending 13 years of Labour rule.

Cameron had moved on, but his party hadn't. For years, a group of anti-EU activists dominated the Conservatives' internal process of picking candidates for seats in Parliament. While Cameron threw the occasional Brussels-bashing bone to euroskeptic MPs, it wasn't enough: They demanded more restrictions on EU powers.

Hence the prime minister's 2013 gamble. In an effort to satisfy his own side, he promised a referendum on leaving the EU by the end of 2017. Cameron's hope was that this pledge would get him through the 2015 election without more rebellions or any defections by members of Parliament to the anti-EU U.K. Independence Party. He failed on both counts.

His further calculation was that, if he was still in office after the 2015 election, he'd be able to secure sufficient concessions from his EU partners that a risk-averse Britain would vote to keep things as they are. “While many British are euroskeptics, they also appear deeply anxious over the perceived risks of Brexit,” says Matthew Goodwin, a professor of politics at the University of Kent, using the shorthand term for Britain's possible exit.

A majority vote for staying in the EU still seems likely. Cameron may have misread the situation in his party, though. The Tory MPs, despite their tough talk on Europe, were expected to fall in behind their prime minister and campaign to stay in the EU. But since he announced on Feb. 20 that a referendum would come on June 23, around half of them have said they'll campaign against him. Worse, among the rebels are one of his oldest political friends, Justice Secretary Michael Gove, and one of Britain's most popular politicians, London's Tory mayor, Boris Johnson. Johnson's announcement of his support for Brexit triggered a drop in the pound

to its lowest level in seven years, as traders sized up the possibility that Cameron might lose. "Cameron's not exactly renowned for having his finger on the pulse of his parliamentary party," says Tim Bale, a professor of politics at Queen Mary University of London.

The mayor, universally known as Boris, is a megastar who operates in a different space from mere prime ministers. With his shaggy hair, tendency to lapse into Latin, and carefully bumbling self-deprecating manner, he's managed to escape scandals, both political and sexual, that would destroy anyone else. Having said as a child that he wanted to be "World King," the ex-reporter has moderated his ambitions. If anyone was uncertain about them, his latest best-selling book is a study of another maverick former journalist who went on to lead his country, Winston Churchill.

It remains to be seen if Johnson can win voters to the Brexit camp. "Cameron will warn that leaving would be a leap in the dark, and the trouble is that Boris quite likes leaps in the dark and taking risks," says Andrew Gimson, Johnson's biographer. "That doesn't necessarily make people feel safe." Few Londoners know what their mayor does, and it's been Johnson's good fortune to be in charge at a time when the city has enjoyed a run of successes, including the 2012 Summer Olympics. Cameron remains the serious leader, arguing that he's motivated solely by what's in the nation's interest—unlike, goes the unspoken suggestion, the ambitious Johnson.

Polling evidence on how the vote will go is unclear. Some show the two sides neck and neck; others show a clear majority of Britons voting to stay in the EU. All the polls have shown a move toward the "leave" side in recent weeks. The differences among the polls may reflect the public's lack of engagement with the question: The EU is something about which few Britons care deeply.

If Britain votes to leave, it's hard to see Cameron staying on as prime minister. Even if the nation votes to stay, the first days of the campaign have shown how deeply the issue of

"While many British are euroskeptics, they also appear deeply anxious over the perceived risks of Brexit."

—Matthew Goodwin,
University of Kent

Europe continues to affect the Conservative Party. It suggests that opposition to membership continues to be a requirement for a Tory leader. That's a big problem for Cameron's favored successor, Chancellor of the Exchequer George Osborne, who's campaigning at his leader's side. It's clearly an opportunity for Johnson. —Robert Hutton

The bottom line The Conservatives are set for a leadership fight after the Tory mayor of London breaks ranks with the prime minister.

Markets

Indonesia's Stocks Point to a Turnaround

- ▶ Investors anticipate a boom, though Mark Mobius begs to differ
- ▶ "There are currently no tailwinds that can help the outlook"

A year ago in Indonesia, nothing was going right. Inflation was up, the currency was sliding to a 17-year low, the stock market was falling, and foreign investors were in the process of pulling \$1.6 billion out of the country. Indonesians were disenchanted with President Joko Widodo. He had been elected in 2014 as an outsider who didn't belong to the traditional power elite in Jakarta and who had big plans to jump-start the economy. Instead, his first year was marked by contradictory policies, delays in launching promised infrastructure projects, and an inability to control the national legislature, still dominated by dead dictator Suharto's old party, Golkar. Beset by party squabbles, Parliament managed to secure passage of only three bills last year, the fewest in at least the past five years, according to the *Jakarta Post*.

Today the Jakarta stock index is the only one in Asia besides the Thai exchange to be in positive territory. The benchmark equity gauge has rebounded 13 percent from its September low and is up 1.4 percent

so far this year. It's up 5 percent when translated into dollars, thanks to the strengthening rupiah. The central bank is cutting interest rates as inflation eases, and \$100 million in foreign funds have returned. After a terrible start in 2015, the economy finished the year with a growth spurt of 5 percent.

Political developments are looking more favorable. Widodo has won the support of important opposition parties, including Golkar, which has pledged to advance his agenda, and may receive cabinet seats and exert more influence in return. The political détente has allowed Widodo to refocus on his pledge to build more ports and railways. The government has allocated almost 300 trillion rupiah (\$22 billion) of the budget to infrastructure.

Jeffrosenberg Tan, a fund manager, sees the nation's equities as sheltered from the slowing Chinese economy, thanks to Indonesia's increasingly affluent population of 256 million. Tan's **Simas Satu** fund, which focuses on Indonesian stocks, has beaten 93 percent of its peers over the past five years, with a return of 9.7 percent, according to data compiled by Bloomberg.

One skeptic is Mark Mobius, the influential fund manager with Franklin Templeton Investments. Mobius says he isn't buying or selling Indonesian stocks. He first wants evidence that the president's plans are succeeding. ▶

Standing Out

Indonesia's equities have become a draw



Otherwise, "there are currently no tailwinds that can help the outlook for stocks, since the earnings prospects are not good," he says. About 71 percent of companies in the index missed earnings estimates in the nine months through September 2015.

The big hope is for a construction boom triggered by Widodo's public works, says Ben Surtees, a fund manager at **Jupiter Asset Management**. "We're seeing more contracts awarded and projects getting under way," he says. "There's more comfort in that part of the economy." —*Harry Suhartono and Jonathan Burgos*

The bottom line Indonesian equities have moved out of the financial doghouse to become investor darlings to some.

Health Policy

Science Takes a Fresh Swat at Zika

► Among the trial methods: genetic engineering, radiation, larvicide

► "We don't really have any method that's working"

Until there's a vaccine or treatment for the Zika virus, the quickest way to control its spread is to attack the mosquitoes that carry it. Biotech companies and governments are wielding their best weapons, all of which involve breeding the blood-suckers in labs and applying treatments that render them unable to reproduce or spread viruses, then releasing them into the wild.

In Brazil, **Oxitec** says it expects approval within weeks to sell the government a bioengineered mosquito incapable of having offspring. If there are enough sterile mosquitoes in the mating pool, fewer new ones will be born. Oxitec, a British subsidiary of U.S. biotech company Intrexon, has conducted trials in South America since 2009 and already has a facility in Brazil that can breed 2 million genetically modified (GM) mosquitoes in a week. "We're very much operational," says Chief Executive Officer Hadyn Parry.

The United Nations International

Atomic Energy Agency has offered to show Brazilian authorities how to sterilize male mosquitoes with radiation. The technique is widely used to control agricultural pests. Australian scientists say they might be able to block transmission of Zika by infecting mosquitoes with a naturally occurring bacterium. And **MosquitoMate**, a Lexington, Ky.-based startup, is experimenting with a way to dust the bugs with a hormone-based larvicide.

These strategies mark a sharp departure from the old pesticide-centric method of "spray-'n'-pray." So far, "we don't really have any method that's working," says Paul Reiter, a consultant on insect-borne disease who's worked at France's Institut Pasteur and the U.S. Centers for Disease Control and Prevention.

Mosquitoes have developed resistance to DDT and many of the synthetic pyrethroid compounds used to treat mosquito nets.

The *Aedes aegypti* mosquito, which spreads Zika and dengue fever, is rapidly proliferating in tropical cities, where it can breed in showers, toilet tanks—even in discarded bottle caps. The World Health Organization, describing *A. aegypti* as "an opportunistic and tenacious menace," on Feb. 16 urged countries "to boost the use of both old and new approaches to mosquito control."

Oxitec says it's readying a Brazilian factory to produce 60 million GM mosquitoes a week, but that would cover an area with only about 60,000 people. While the British company won't disclose construction costs, they could easily run into the tens of millions of dollars. A decade ago, it cost \$8.4 million to build a facility in Brazil capable of breeding and irradiating 200 million Mediterranean fruit flies weekly, according to a 2011 study published by Oxitec scientists. The breeding facilities for the other treatment methods have similar requirements.

Introducing treated mosquitoes into the general population presents special challenges. They're too fragile



Genetic engineering

Male mosquitoes are modified so offspring die prematurely and don't reproduce. Oxitec has approval to breed GM mosquitoes in Brazil. It seeks final Brazilian clearance to market the service and FDA approval for U.S. field trials.

Advantages

The technique has already been tested for mosquito control in Brazil. Oxitec has one breeding facility and is building another.

Drawbacks

GM mosquitoes may face resistance from the public and from regulators.



Radiation

Male mosquitoes are irradiated to make them sterile. Recent field trials have been done in Italy and on Réunion Island, a French possession in the Indian Ocean. The method has been used to combat fruit flies and other pests.

Advantages

The UN's atomic agency offers technology and training free of charge to governments.

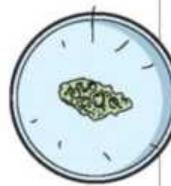
Drawbacks

No facilities exist in Zika-affected areas. Radiation must be calibrated to avoid leaving mosquitoes too weak to mate.



Bacteria

Female mosquitoes are infected with Wolbachia, a bacterium that blocks transmission of the dengue virus and may also stop Zika. A research nonprofit has tested it in Australia since 2011—with smaller tests in Brazil, Colombia, and Southeast Asia.



Advantages

The method could yield long-term cost savings because infected mosquitoes spread bacteria to each other.

Drawbacks There are no large-scale facilities in affected areas. More research is needed on the bacterium's effectiveness.



Mosquito-borne poison

Male mosquitoes, dusted with a larvae-killing substance that's harmless to the insects, spread the poison to breeding areas. The technique is undergoing field tests in California.

Advantages

It's simpler than radiation and genetic modification.

Drawbacks

No facilities exist in Zika-affected areas. Mosquitoes may also develop resistance to the poison.



drop from planes. Oxitec will use trucks to spread its genetically modified insects. The UN is working with a German company to develop delivery by drone.

Once the mosquitoes reach their destination, though, they'll begin annihilating themselves, and that's a big advantage, says MosquitoMate founder and CEO Stephen Dobson, an entomology professor at the University of Kentucky. Says Dobson: "We let the mosquitoes do the work for us."

—Carol Matlack, with Jason Gale and Jonathan Tirone

The bottom line Several new anti-mosquito treatments seek to introduce lab-bred bugs that can't reproduce or transmit viruses.

Currencies

Mexico Warns, Leave the Peso Alone

► A rate hike and secret dollar sales could deter speculators

► "There's a risk the central bank will be on the other side of your trade"

Mexico is tired of seeing the peso picked on. It's depreciated as much as 13 percent against the dollar this year in intraday trading, making it the worst-performing major currency of 2016.

Weak economic fundamentals aren't what's sapping the peso's strength. Inflation in Mexico is near a 47-year low, and annual growth is expected to accelerate for a third consecutive year, to 2.6 percent. The peso is vulnerable because it's the most-traded currency in emerging markets, which makes it an ideal hedging instrument for speculators who are betting on the direction of other developing economies.

The peso's daily trading volume of \$135 billion a day is \$15 billion higher than that for China's yuan, the next-most-traded among developing countries, according to data from the Bank for International Settlements. The peso also trades on global markets 24 hours a day, five days a week. That's true of only two other emerging-market currencies—the South African rand and the Turkish lira, both of which have far lower daily trading volumes. So if

there's bad news out of Brasilia on a Friday evening, after the markets there are closed for business, it's the peso instead of the real that takes a beating. "The peso was being used to hedge not only Mexico risk but everything else," says Eduardo Suarez, a Latin America strategist at Bank of Nova Scotia.

Just days after the peso flirted with an all-time low of 20 to the dollar in February, officials swung into action. On Feb. 17, in a rare joint announcement, the central bank governor and finance minister said Mexico would scrap its system of predictable dollar auctions and start selling greenbacks directly to banks, at any time and in undisclosed amounts. (Dollar sales bolster the peso by removing some of the local currency from circulation.) "We are trying to anchor the value of the currency" to economic fundamentals, Minister of Finance Luis Videgaray said in an interview two days later.

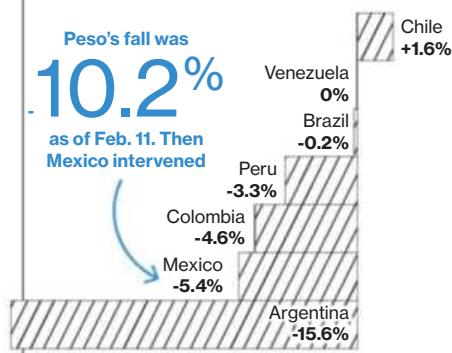
That's a polite way of telling speculators to back off. "What the government is saying is basically, 'Hey, if you're going to choose a currency as a proxy for emerging-market risk, lemme just tell you, there's a risk the central bank will be on the other side of your trade,'" says Benito Berber, senior economist for Latin America at Nomura Holdings in New York.

To drive home the point, Bank of Mexico Governor Agustín Carstens jolted the markets by raising the benchmark interest rate by a half-percent, to 3.75 percent, on Feb. 17—the first time the bank has raised rates outside of a scheduled meeting in at least 13 years. A higher interest rate makes it more expensive for speculators to borrow pesos to buy other assets. The volume of such trades has exploded thanks to high-speed computerized trading, which is a reason the peso has been at the mercy of events far beyond Mexico's borders. "Mexico has drawn a line in the sand with high-frequency firms," says Alejandro Silva, a partner at Silva Capital Management in Chicago. "If you are a high-frequency firm, you have to constantly be wondering if someone is going to come in and intervene in the currency."

The peso has gained as much as 5 percent since the moves. If investors thought Mexico's economy in serious trouble, maneuvers of this type would

Rough Start for the Peso

Percentage change in currencies against the U.S. dollar from Dec. 31, 2015, through Feb. 23



DATA COMPILED BY BLOOMBERG

have done little to slow the peso's slide.

Not all of the peso's weakness can be blamed on external factors, however. The price of oil, which provides one-fifth of public revenue, has tumbled, and the state-run oil giant **Petróleos Mexicanos** posted a record loss in 2015, the 11th consecutive year in which it logged a drop in crude output.

Absent any signs of deeper trouble in the economy, the central bank's rate hike and the new method for dollar sales should continue to buoy the currency. What they did was "very intelligent," says Nova Scotia's Suarez. "What is going to change is that the peso will no longer be the most bullied kid in the class." —Isabella Cota and Nacha Cattan

The bottom line Mexican policymakers have unveiled measures to discourage speculators from using the peso as a hedging instrument.

Manufacturing

China Tries to Tackle Its Commodities Crisis

► The steel industry suffers from a severe glut—but will resist cuts

► "Steelworkers are pretty feisty people when it comes to protests"

China has had an overcapacity problem in its aluminum, chemical, cement, and steel industries for years. Now it's reaching crisis levels. "The situation has gone so dramatically bad that action has to happen very soon," said Jörg Wuttke, president

Shale Ahoy!

160k
Capacity of the Asia
Vision in cubic meters



The **Asia Vision** LNG tanker, docked near Cheniere Energy's terminal in Louisiana on Monday, Feb. 22. It will soon deliver the first exports of liquefied natural gas originating from the U.S. shale patch. The ship is headed for Brazil. The first U.S. crude exports in 40 years shipped in December.

◆ of the European Union Chamber of Commerce in China, at a press conference in Beijing on Feb. 22, where a chamber report on excess capacity was released. That report's conclusion: "The Chinese government's current role in the economy is part of the problem," while overcapacity has become "an impediment to the party's reform agenda."

Many of the unneeded mills, smelters, and plants were built or expanded after China's policymakers unleashed cheap credit during the global financial crisis in 2009. The situation in steel is especially dire. China produces more than double the steel of Japan, India, the U.S., and Russia—the four next-largest producers—combined, according to the European Union Chamber of Commerce. That's causing trade frictions as China cuts prices. On Feb. 12 the EU announced it would charge antidumping duties of as much as 26.2 percent on imports of Chinese non-stainless steel.

Steel mills are running at about 70 percent capacity, well below the 80 percent needed to make the

operations profitable. Roughly half of China's 500 or so steel producers lost money last year as prices fell about 30 percent, according to Fitch Ratings. Even so, capacity reached 1.17 billion tons, up from 1.15 billion tons the year before.

With about one-quarter of China's steel production coming from Beijing's neighboring province of Hebei, excess production is a major contributor to the capital's smoggy skies. And with average steel prices likely to fall an additional 10 percent in 2016, fears of spiraling bad debts are growing. A survey released in January by the China Banking Association and consulting firm PwC China found that more than four-fifths of Chinese banks see a heightened risk that loans to industries with overcapacity may sour.

In December, Premier Li Keqiang warned that money-losing industrial "zombie companies" are wasting scarce resources and must be shuttered. In February, China's State Council announced plans to eliminate up to 150 million tons of steel production in five years and said

regulations will be loosened to speed up mergers and acquisitions in steel and other industries. China will "actively and steadily push forward industry and resolve excess capacity and inventory," the People's Bank of China said on Feb. 16 after a meeting with the National Development and Reform Commission, the banking regulatory commission, and other agencies.

The government may find it hard to achieve that goal. The steel industry will lose as many as 400,000 jobs as excess production is shuttered, Li Xinchuang, head of the China Metallurgical Industry Planning and Research Institute, predicted in January. Hebei and the industrial northeastern provinces of Heilongjiang, Jilin, and Liaoning, home to much of China's steel production, don't have lots of job-creating companies to absorb unemployed steelworkers. "They are concerned about the possibility of social unrest with workers' layoffs," says Peter Markey, Shanghai-based China and Mongolia mining and metals leader at consultants Ernst &

Young. "As you can see around the world, steelworkers are pretty feisty people when it comes to protests."

Provincial and city governments, which control the local branches of China's state-owned banks, are likely to resist the mandate to downsize. Officials are often promoted based on the economic performance of their regions. And cities rely on local companies for much of their tax revenue. The central government "will really have to push hard" to make a dent in excess production, says May Zhong of Standard & Poor's Ratings Services. "Reducing overcapacity will take time because of pushback."

While central government officials claim 90 million tons of steel production capacity was shut down for good over the past five years, that figure doesn't count newly built mills, says Sebastian Lewis, Shanghai-based editorial director for China at Platts, the commodities research firm. And steelmakers have developed elaborate strategies to avoid Beijing's orders. Common ploys include turning off one blast furnace while increasing production in the remaining ones, or temporarily idling a facility and claiming the shutdown is permanent. How many real closings there will be "is always unclear," says Lewis. "It is really hard to get a sense of when capacity really is being retired." —Dexter Roberts

The bottom line Steelmaking capacity in China keeps rising despite government pledges to cut production and end easy credit.

Fiscal Policy

The Red Ink Is All Over Trudeau's First Budget

► A shortfall in tax revenue and extra spending drive up the deficit

► "He's in the honeymoon phase still a little bit"

A fading Canadian economy is putting Justin Trudeau's optimism to the test. On Feb. 22 growth projections for 2016 were lowered from 2 percent to 1.4 percent. Canada's dollar fell almost 10 percent against the greenback in Trudeau's first 11 weeks in office. Now

his finance minister has previewed the March 22 budget by revealing that the deficit will be higher than Trudeau's Liberal Party anticipated.

All three of the commitments Trudeau gave during the autumn campaign to quell concerns about his fiscal management are falling by the wayside. He pledged the budgetary shortfall would be no more than C\$10 billion (\$7.3 billion) a year. Minister of Finance Bill Morneau is signaling that the figure will be closer to C\$30 billion (\$22 billion) once campaign promises are factored in. That will make it unlikely that Trudeau can fulfill his other two commitments: to balance the budget by 2019 and keep decreasing the national debt as a share of the economy.

Despite all the negative economic news, driven in large part by the collapse of oil prices, the rookie leader and son of former Prime Minister Pierre Trudeau is more popular than ever. Deficits "won't hurt his numbers until there's some economic event that actually affects people's daily lives," such as layoffs or another plunge in the dollar, says Toronto pollster Lorne Bozinoff of Forum Research. A poll in February found support for Trudeau's party at 49 percent, up from 39 percent on Election Day in October. "He's in the honeymoon phase still a little bit," says Bozinoff. "He's got that, but he's got to now start to really deliver."

Many of Canada's foremost economists back deficit spending. Economist David Rosenberg of investment managers Gluskin Sheff has said deficits of C\$50 billion are appropriate in this slow-growth environment. A C\$30 billion deficit is equal to just 1.5 percent of gross domestic product, a level most governments would gladly take. The U.S. budget gap was almost twice that last year, according to the Congressional Budget Office. Canada's debt, at about 31 percent of GDP, remains among the lowest for Group of Seven nations, giving

Trudeau room to apply stimulus to the struggling economy.

His midcampaign promise to run deficits to spark growth separated him from his opponents. Canadians have been leery of deficits since experiencing a quarter-century of them, beginning with Trudeau's father. After a painful adjustment in the mid-1990s, Canada ran surpluses until the Great Recession. Former Prime Minister Stephen Harper staked his economic bona fides on returning the budget to balance in the buildup to the election, but voters preferred Trudeau's pledge of more infrastructure spending to boost the economy.

Most of the gap for this year reflects plunging government revenue, not Trudeau's ambitious spending plans. Canada is in transition as it seeks more sources of growth amid the commodities decline.

Among Trudeau's tasks is replacing the part of GDP that's disappeared since 2014.

"The economy has been hit by the drop in energy sector capital spending, which in 2014 was worth about 3 percent of GDP and is in the process of falling to half that level," says Avery Shenfeld, chief economist at the Canadian Imperial Bank of Commerce. A graying population and slow productivity growth make it harder to restore that lost 1.5 percent of GDP.

Although many of Canada's economists have no trouble with the extra spending, at some point restraint will be necessary. "The finance minister's job in every government—and she or he may not relish it, but it's the job—is to say no, and Bill Morneau doesn't seem to have said no to much yet," says Bill Robson, president of the C.D. Howe Institute, a nonpartisan think tank in Toronto, of which Morneau is a former chairman. "The sooner the day comes when he says no, the better off we will be in the long run."

—Josh Wingrove

The bottom line Canada's unexpected budget deficit still leaves room for more government spending to boost the economy.



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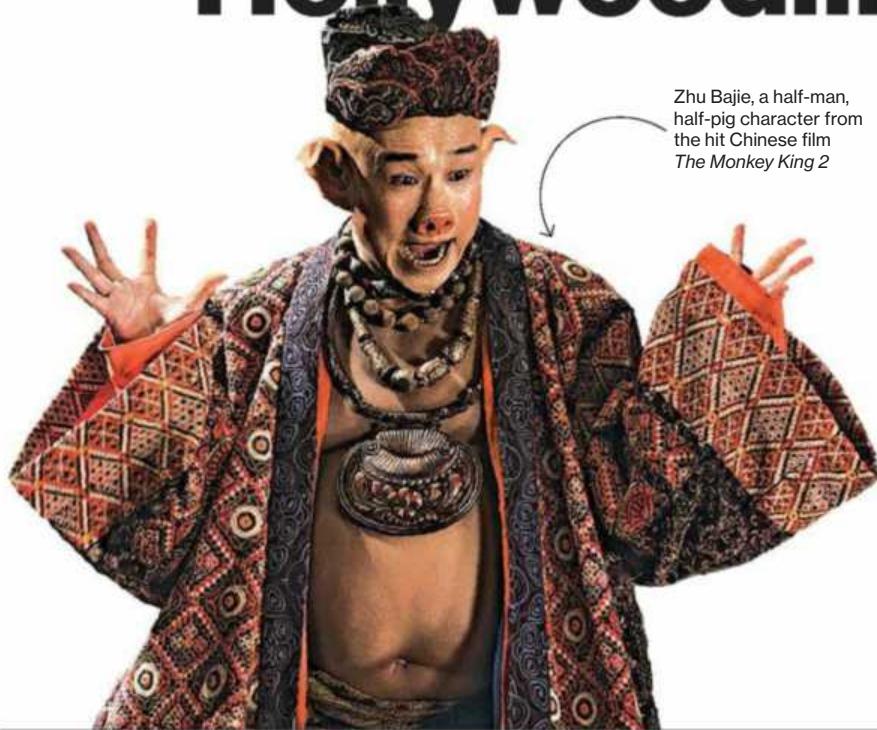
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We BEAT Hollywood!!!



Zhu Bajie, a half-man, half-pig character from the hit Chinese film *The Monkey King 2*

► China's movie industry is becoming a dominant force

► "The technical expertise is getting far better than it was"

To celebrate the Lunar New Year, Fei Li did what tens of millions of other Chinese did: She went to the movies. The 29-year-old finance professional and six family members, from her 91-year-old grandmother to her 6-year-old niece, went to see *The Mermaid* at the Capital Cinema in Beijing's Xicheng district. "We all love

it," says Li, who paid about 35 yuan (\$5) to see the movie a second time.

Buoyed by holiday audiences, *The Mermaid*, a quirky comedy from director Stephen Chow about a mermaid who falls in love with a real estate tycoon she's sent to assassinate, is the highest-grossing film of all time in China. It's rung up more than \$440 million in

Nascar joins the big leagues 24

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D-Mart has figured out how to satisfy Indian shoppers 26

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ticket sales since opening on Feb. 8, according to box-office researcher EntGroup, overtaking local hit *Monster Hunt* and Hollywood's *Furious 7*.

"What we are finding is that the technical expertise is getting far better than it was, and the Chinese audience is responding," says Marc Ganis, co-founder of Jiaflix Enterprises, which helps market and distribute films in China. "The Hollywood blockbusters were just so far superior, many Chinese would go and watch those and live with subtitles and voice-overs," he says. "Now they don't have to."

The latest box-office success signals a shift in the movie industry's balance of power. Facing a quickly growing and maturing Chinese market—average growth in recent years has been 34 percent—Hollywood is looking to deepen its relationship with China in mutually beneficial ways.

Chinese moviegoers "now have big-budget, action-packed domestic films that can compete with Hollywood in terms of both special effects and far more interesting stories for the local populace," says Jonathan Papish, an analyst with researcher BoxOffice.com.

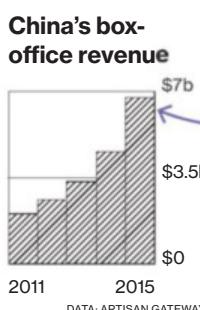
In February, China broke the global box-office record for a single week—\$557 million from Feb. 8-14, EntGroup says, all for local productions, because imports aren't shown during the holiday period. The country surpassed a \$534.7 million record set in the U.S. in late December, after the release of *Star Wars: The Force Awakens*. At this rate, China could overtake the U.S. in annual ticket sales as early as 2017, industry watchers say.

China has been a focus for Hollywood studios in recent years as the U.S. film market has stagnated. In 2015, China's box office totaled \$6.8 billion, up 49 percent from the previous year, says consulting firm Artisan Gateway. The North American (U.S. and Canada) box office had its biggest year ever in 2015 at \$11.1 billion, thanks to several franchise releases, including *Star Wars*. But it dropped almost 2 percent from 2010 through 2014, to \$10.4 billion, according to the Motion Picture Association of America. Since 2012, Hollywood's share of the Chinese market has

Companies/Industries

fallen from 49 percent to 32 percent, says EntGroup.

China limits U.S. movie imports to 34 annually. The industry is closely managed by two government-controlled entities, the State Administration of Press, Publication, Radio, Film & Television (SAPPRFT) and China Film Group, which select the films that will enter the market, set opening dates, and determine the number of screens.



Hollywood is seeking to strengthen its foothold in China to take advantage of the fast pace of growth. Studios including **Universal Pictures** and **Warner Bros.** have struck partnerships with Chinese film and media companies to gain bigger audiences at more venues. (The country has about 31,630 movie screens; it added 8,035 last year.) The deals "give U.S. producers someone with relationships at the regulatory level in China to call on" to increase access to the market, says Rance Pow, founder and president of Artisan Gateway. And that China now boasts more accomplished filmmakers only adds to the interest.

Since 2014, **Paramount Pictures**, working with SAPPRFT, has invited several Chinese directors to training programs in Los Angeles. The project benefits all parties, says Rob Moore, Paramount's vice chairman: "The real upside for us is being able to spend time and get to know a number of these top Chinese filmmakers and get their perspective on the Chinese market, which has been paying dividends for us in terms of the success of *Mission: Impossible* and *The Terminator*."

Chinese companies also have boosted their investments in Hollywood. China-based studio **Perfect World Pictures** said in mid-February it would spend more than \$250 million on 50 movies produced over the next five years by Comcast's Universal Pictures, whose *Furious 7* has brought in \$390.9 million in China ticket sales since opening there last April. In January, Wang Jianlin, chairman of conglomerate **Dalian**

62%
Amount of revenue
from local Chinese
films in 2015

Wanda Group, became the first Chinese person to control a Hollywood film company after buying Legendary Entertainment, the co-producer of *Jurassic World*, for \$3.5 billion. "The Legendary deal is a puzzle piece" for Wanda, Pow says. "It's a component of a bigger and grander strategy to become globally integrated in the film business."

Hollywood and China are growing more comfortable with each other. In the future, says Jonah Greenberg, head of the China operation for Creative Artists Agency, Chinese directors will make big-budget movies in English for a global audience. In February, Universal Pictures plans to release director Zhang Yimou's *The Great Wall* with Matt Damon in the largest production ever shot entirely in China.

Many in Hollywood say China's thriving industry could ease the curbs on imported films. A U.S.-China memorandum of understanding setting the film quota expires next year, and new terms will be needed.

"We believe it is in the long-term best interests of the U.S. studios if there is a thriving Chinese marketplace that will both lead to the Chinese movie business continuing to expand, as well as hopefully more opportunity for U.S. movies and U.S. studios," says Paramount's Moore. —*Anousha Sakoui, with Stephen Tan and Grace Huang*

The bottom line Box-office sales are growing 34 percent a year in China, which could overtake North America as the biggest movie market in 2017.

Sports

Nascar Takes a Page From the NFL Playbook

► **It will guarantee 36 cars that they will race in all key contests**

► **"Sponsors don't like risk. Sponsors want to know they're in the show"**

Ever since Robert "Red" Byron in 1948 drove his Ford over the sands of Daytona Beach at 75 miles per hour for a \$1,000 prize, **Nascar** has operated pretty much the same way. Teams showed up at the Florida track with a car, a driver, and a crew and tried to

win prize money; they had no larger stake in the enterprise. That all changed this year: When Denny Hamlin of **Joe Gibbs Racing** took the checkered flag at the Daytona 500 on Feb. 21, he did so as a charter member of Nascar rather than just a tire-burning freelancer.

Under an agreement announced less than two weeks earlier, the racing circuit handed out charters—somewhat akin to a team franchise in the NFL or NBA—to 36 cars. The nine-year charters guarantee a slot in every race in Nascar's top circuit, the Sprint Cup Series, and can be bought and sold. Previously, teams held one-year contracts that laid out the conditions and prizes for racing. But they had to qualify for each race. A team owner who wanted to cash out had nothing to sell but a driver contract and used auto parts. "We needed to make a contemporary, modernized business model," says Nascar Chief Operating Officer Brent Dewar, who hired McKinsey consultants to review the franchise models of other U.S. sports leagues. "We studied everything," he says. "This is bespoke to us. And it's something we can build on."

With the annual cost of putting a car on the track ranging as high as \$25 million, even successful teams don't win enough in prize money to cover their costs. Instead, they depend on sponsors for about 75 percent of their revenue. That worked well enough until Nascar's growth sputtered out right before the financial crisis of 2008, and TV ratings and attendance dipped. "You saw a number of longtime sponsors exit the sport," says Jon Flack, chief operating officer of JMI, a leading motor-sports marketing agency. Those that remained, he says, mostly backed a handful of top teams. Although the dominant owners, such as **Hendrick Motorsports** and Joe Gibbs Racing, could count on their primary "hood" sponsors to cover their costs, many teams lost money.

"It's a great sport but a very difficult business model," Rob Kauffman, co-owner of Michael Waltrip Racing, told reporters when he decided to shut down the team last summer. Kauffman, now a co-owner at **Chip Ganassi Racing**, was a leading advocate for team owners in negotiations for the charter plan. "It allows us to invest for the longer term rather than merely survive year-to-year," he says.

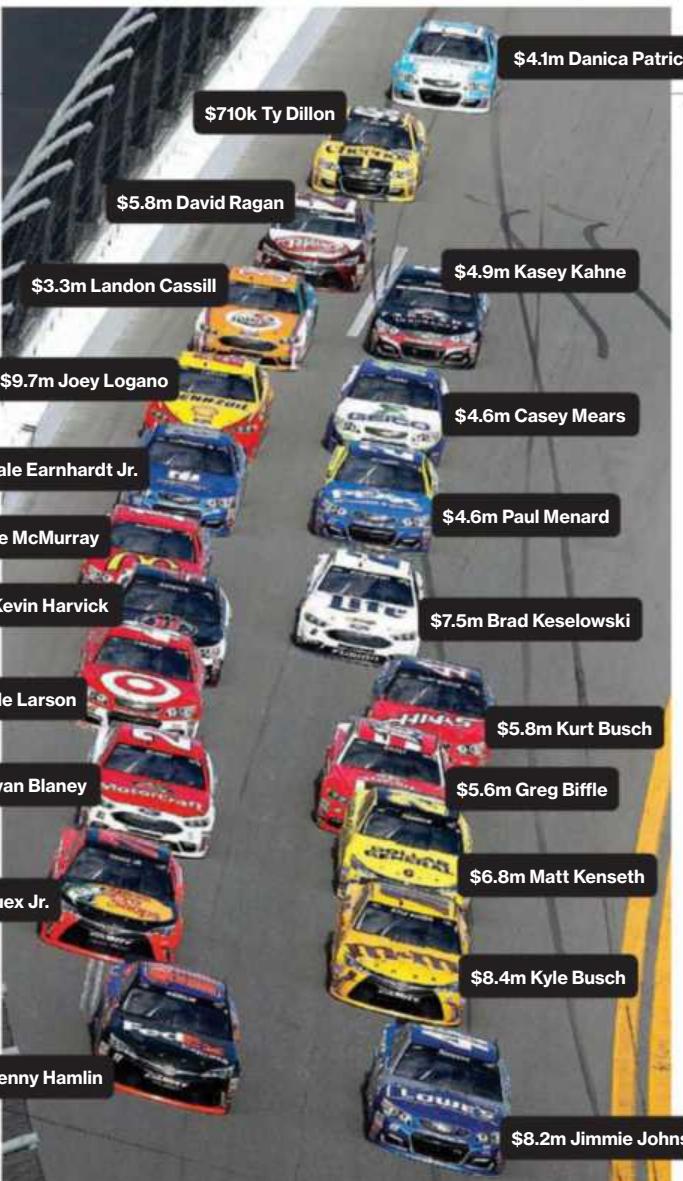
Companies/Industries

Running in the Red

It costs up to
\$25m
per season to put a car on the track in Nascar. Not even the best teams earn that much in prize money. Shown are 21 cars from this year's Daytona 500 and their total Sprint Cup winnings in 2015.

Nascar's new charter plan should help teams get more from sponsors.

Top 2015 earner



Now teams can promise sponsors their brands will be on display in every race for years. "That may not sound like a lot, but certainly, as you're out in corporate America asking for the large sponsorship dollars that we ask for, that comes up more than you would think," says Tad Geschickter, co-owner of **JTG Daugherty Racing**. Such talks will be easier because "sponsors don't like risk," says JMI's Flack. "Sponsors want to know they're in the show."

The benefits of this stability, Flack says, are already on display. Regan Smith, the eighth-place finisher at Daytona this year, is a new driver for **Tommy Baldwin Racing**. The team ponied up to hire Smith to replace a less experienced driver in January, knowing it would soon hold a charter. "I'm not sure they would've gone after him a

year ago," Flack says. "The sponsors all feel good about that, because they've got an upgraded guy who gives them a better chance of more visibility."

It's still possible to get into a Nascar race without a charter. Four slots in each Sprint Cup Series race remain open to noncharter teams that do well in qualifying races. And they can compete in the Xfinity Series, Nascar's minor league. The charter deal doesn't add to racing teams' overall share of the \$820 million a year Nascar gets from TV deals with **NBC** and **Fox**. Nascar keeps 10 percent while paying 65 percent to host tracks and 25 percent to teams through the prize purse. But the new setup does give guaranteed payouts to charter holders.

The cash value of a charter remains uncertain. Kaufmann, whose defunct

Michael Waltrip Racing team was granted a pair of them, has already sold one each to the Joe Gibbs and **Stewart-Haas Racing** teams. He won't give prices but pegs a charter's value "in the low, single-digit millions." That's not NFL money, but it's a start for owners. Says JTG's Geschickter: "It gives us all a potential to have an exit strategy, which wasn't there before." —*Ira Boudway*

The bottom line The charters Nascar granted to 36 cars guarantee slots in all Sprint Cup races and make their teams long-term stakeholders.

Airlines

At World's Worst Carrier, Change Is in the Air

► **North Korea's Air Koryo is cleaning up its act**

► **"I'm sick of all the same footage of marching, pictures of Kim"**

After years of being ranked by business travel site Skytrax as the world's worst airline, North Korean national carrier **Air Koryo** is undergoing a revolution of sorts. New planes, in-flight entertainment options, smart uniforms for the cabin attendants, and even an upgraded business class are coming to the much-maligned operation. It's all part of supreme leader Kim Jong Un's effort to boost tourist numbers 20-fold, to 2 million, by 2020 and supplement the nation's meager foreign exchange.

That may mean adventurous travelers—like those who boast they trekked to Mongolia's Ulaanbaatar back when they had to pack their own toilet paper—should book tickets now, before the thrill of flying the world's only one-star airline vanishes.

The main draw for many is to peek inside the world's most isolated country. As Singaporean Mindy Tan put it after a visit last year: "I'm sick of all the same footage of marching, pictures of Kim. I just had to witness it for myself."

For those not put off by the odd nuclear test, missile launch, or party purge, there are options aplenty. Where else can you run a marathon down the same Pyongyang streets frequented by young girls with replica grenades hanging from their belts ▶

► or watch 100,000 kids do a synchronized dance? North Korea wants to eventually open attractions such as the Masikryong ski resort and Lake Taesong golf club. Neither Colorado's Aspen nor Scotland's St. Andrews needs to worry yet.

It's been said that the real draw of travel is the journey rather than the destination, and for that Air Koryo doesn't disappoint. The video screens that drop down from the ceilings of its planes entertain guests with propaganda broadcasts and concerts by supreme leader Kim's favorite all-female band, Moranbong, which sings patriotic songs about, well, him. Bring noise-canceling headphones. It's a communal experience, and there's no volume control.

Air Koryo recently acquired two Russian-built Tupolev Tu-204s for international routes, with an economy ticket costing about 900 yuan (\$138) for the two-hour journey from Beijing. But U.K.-based **Juche Travel Services** is offering an aviation-themed tour of North Korea from May 9-13 for those who want to fly on the older Soviet-era aircraft the airline is famous for. Choices include buzzing across the picturesque Myohyangsan region on a Mil Mi-17 transport helicopter and a ride on the last passenger Ilyushin IL-18 still in scheduled service. "It's a very different experience, traveling back 20, 30 years," says Sam Chui, an aviation enthusiast who's flown Air Koryo about 20 times.

Fliers may endure long check-in lines and immigration hassles on their way to North Korea, but things should be copacetic after arrival in the Democratic People's Republic.

Digits



Air Koryo burger

No longer do tourists have to shuffle through the temporary shed that masqueraded as an airport terminal for the past five years. The capital has a sleek new building.

With fewer than a half-dozen international flights a day, the airport bus may deliver passengers on time to the almost deserted building.

The food, especially in the new business-class lounge, has improved, but the most-photographed part of any Air Koryo trip remains the in-flight meal. "The burger has been going on for so many years, everyone's making fun of it," says Chui, who's eaten at least 10. When contacted for details about the comestible, representatives at Air Koryo's Beijing office didn't respond. —Clement Tan and Sam Kim

The bottom line Air Koryo is upgrading its service as part of North Korea's plan to increase tourist arrivals 20-fold. It may be too aggressive a target.

scaled-down wholesaling operation that's been burning cash in each of the last seven years. French merchant **Carrefour** came in 2010, opened five stores, then left in 2014. Losses for Germany's **Metro** have also persisted, 13 years after it opened its first store.

But Indian supermarket operator **D-Mart**, which has turned a profit in each of the last 15 years, seems to have figured out how to satisfy Indian shoppers. The chain gives customers far fewer choices of no-frills products, enabling it to negotiate better prices with vendors. It also refuses to spend on analytics, loyalty programs, social media, or other newfangled strategies. Instead, it sells cheap stuff. "We've been doing just one thing. No distractions," says Neville Noronha, chief executive officer of D-Mart parent Avenue Supermarts. "On Sunday evenings our stores are so crowded, it's worse than a local train during peak hours."

With only 94 stores, D-Mart takes a different path from those of many local competitors, as well. India's biggest supermarket operators, **Future Retail** and **Reliance Industries**, have expanded vigorously over the past few years, opening 1,000 supermarkets combined. That's caused them to clock tiny profits while piling on debt. D-Mart has expanded more slowly, adding about 35 stores since 2013. But its revenue has grown faster. D-Mart sales for the year ended last March increased 38 percent from a year earlier, to 64.5 billion rupees (\$940 million), and will likely show a 29 percent increase when this year's figures are calculated, Noronha says.

That's buoyed D-Mart's profitability. Ebit margins, or profit before interest and taxes as a percentage of sales, were 6.1 percent for D-Mart in the last fiscal year, compared with 5.9 percent at Future with its 400 stores and 2.4 percent for Reliance's 3,000 outlets, which include supermarkets and clothing stores.

Walmart has yet to turn a profit in India and logged a 2.3 billion-rupee loss in 2014 from its 20 stores, which sell only to registered businesspeople. Metro, which runs a network of 19 wholesale stores, reported a loss of 1.1 billion rupees in the year ended March 2015. A spokeswoman reiterated Metro's goal of expanding to 50 stores by 2020. Future and Walmart didn't

Retailing

D-Mart Solves India's Retail Riddle

- ▶ Cheap grocery prices fuel sales of other, higher-margin goods
- ▶ "We've been doing just one thing. No distractions"

India has long been the place big retailers go to lose money. **Walmart Stores** landed in 2007 with dreams of a supermarket empire but, because of measures designed to protect local business, has had to settle for a

\$252

The monthly earnings of 82 percent of Brazil's 28,203 pro soccer players are less than this amount, equivalent to 1,000 reais, the CBF soccer federation says

It barely beats Brazil's 880-reais minimum wage. That's one reason 1,784 Brazilians play for overseas teams

respond to e-mails seeking comment.

With outlets mostly concentrated near Mumbai, D-Mart squeezes more revenue from its stores than competitors—an estimated 24,000 rupees of sales per square foot, vs. 9,200 rupees at Future and 14,100 at Reliance. "Other big retailers, they start hiring from the top, set up the head office, warehouses, and then eventually hire for the store. That kills it," Noronha says. "When you start building from the top, the cost will be too high."

India requires makers of packaged goods to set a maximum retail price, or MRP, for every item. Selling products—whether bath soap or cooking oil—for more than this published price is illegal. The statute is meant to protect consumers from wanton profiteering, but it also makes it "incredibly difficult" to profitably run a retail business, says Ashok Deenadayalu, a consultant at Mithras Retail Services. That's because chains can't charge more based on where items are sold—even when real estate or distribution costs are higher.

D-Mart's draw for consumers is its promise to sell goods below this price, some by as much as 12 percent; it sells groceries plus a wide assortment of cheap household items—school bags, cooking utensils, and the like—akin to a dollar store. "If you give cheap prices on basic and common products, the perception gets built that everything in the store is cheap," Deenadayalu says. "Customers come for the food but also buy a whole lot of other goods that have high margins."

Growth will come from new stores and trimming costs, but margins are unlikely to increase much, Noronha says. "When you are in the business of value retail, it's stupid to expect anything more," says the former Unilever manager. "In a developed country, you can get away with making 30 and 40 percent gross margins. Not here."

—Adi Narayan and Rajkumar K Shaaaw

The bottom line Foreign retailers have had a tough time in India. A local, D-Mart, uses supercheap prices to win business.

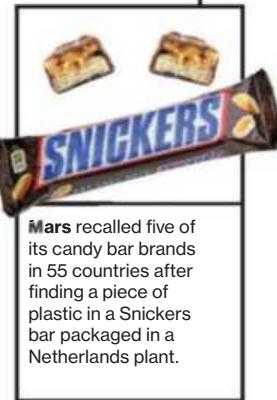
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By Kyle Stock

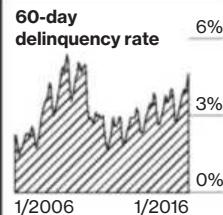
Too Many Hondas

●  Honda began a major and unexpected overhaul, starting in the C-suite. The Japanese auto giant announced the retirement of eight top executives, including Chairman Fumihiko Ike. The company is also shaking up its product-development process, creating positions to supervise designs. Plagued by waves of recalls, Honda said it has been introducing models too quickly. ●  Starbucks revamped its loyalty program to tie rewards to the amount customers spend rather than



Mars recalled five of its candy bar brands in 55 countries after finding a piece of plastic in a Snickers bar packaged in a Netherlands plant.

Delinquencies on subprime auto loans have reached their highest level since 2010—worrisome news for banks, carmakers, and the economy at large.



how often they visit, spurring an outcry. Starbucks said the tweak is partly meant to prevent customers from gaming the system by asking baristas to ring up items separately. ●  Amazon.com quietly took a step into the fashion business. The

Web retailer is selling at least 1,800 products including clothing and handbags under seven private labels with boutique-sounding names such as North Eleven and Lark & Ro. The strategy is in line with earlier moves to add a publishing arm and sell house-brand electronics. ●  Beyond the PR fallout from waves of sick customers, Deutsche Bank said Chipotle Mexican Grill suffers from menu fatigue. In a note to investors, bank analysts said Chipotle would struggle to win back customers, in part because it hasn't changed its menu much in two decades; the only big addition was the tofu sofritas in 2014.

●  Airbus has announced it will increase production to meet demand from carriers. The company expects to deliver more than 650 jets this year, compared with the 635 it moved in 2015. Airlines are using cash freed up by falling fuel prices to stock up on new, fuel-efficient aircraft.

CEO Wisdom



"Facebook at 1.6 billion users is a really tough comparison bar."

—Executive chairman and former Foursquare CEO Dennis Crowley discussing Silicon Valley valuations

February 29 — March 6, 2016



► **The Tea Party challenges Alabama's GOP senator**

► **"For many of these Republicans, the election...is primary day"**

Alabama Republican Senator Richard Shelby, who boasts a score of 99 percent from leading conservative group Heritage Action for America, is a pillar of today's GOP establishment. First elected to the House of Representatives in 1978 as a Democrat, Shelby moved to the Senate in 1987 and flipped parties after the Republican revolution of 1994. He's now the chairman of the Senate Banking Committee and one of his party's top fundraisers.

This year, that profile may work against him. Shelby, 81, is facing a challenge from the right in his primary, which takes place on March 1, alongside the state's presidential nominating contest. Senate Majority Leader Mitch McConnell finds himself in a quandary as he tries to hold on to the GOP's four-seat Senate advantage: On the one hand, he can't afford to alienate moderate, independent voters in swing states like Florida and New Hampshire, where Senate races are likely to be close; on the other, he's bound to protect incumbent senators from being challenged from the right, a concern that underpins his decision to block confirmation hearings for any Supreme Court nominee until after the general election in November. "Especially in this atmosphere where there's a lot of anti-establishment feeling out there, anything can catch fire," says consultant Ron Bonjean, who worked with the National Republican Senatorial Committee for the 2014 midterms. "For many of these Republicans, the election isn't Election Day. The election is primary day."

Shelby's chief antagonist is a 33-year-old marine named **Jonathan McConnell** (no relation to the Senate majority leader). A first-time candidate who runs a maritime security firm he started while in law school at the University of Alabama, McConnell is the son of a former state GOP chairman. According to the most recent federal filings, he's raised more than \$766,000 for his bid and has about \$92,000 on hand, far less than the \$12.2 million Shelby has in the bank. McConnell says he's faced uphill battles before; as an undergraduate

at Auburn University, he succeeded in becoming president of the student body even though he wasn't part of the school's powerful fraternity system. McConnell outmaneuvered the Greek machine by convincing other constituencies that they were getting short-changed. "The student government association benefited the Greeks, so what we did is infuriate the band and everyone else on campus," McConnell says. "It's very similar to what we have now—we have a club, these career politicians. It's an elite society that take care of themselves."

On Feb. 18, McConnell and three other Republican candidates gathered at a gun store in Hoover, a Birmingham suburb, for a debate. (Shelby was invited but declined to attend.) As the candidates sat at the front of the room, the store's owner, Gene Smith, walked in and told local TV news crews to turn off their cameras. Then Smith, a Shelby supporter, told the crowd he'd never given permission for the Rainy Day Patriots, a Tea Party group that regularly holds meetings at the store, to host a Senate debate. He said he was willing to let the event proceed, subject to one compromise: "Because he's not here to defend himself, no negative statements will be made about Senator Shelby." The crowd laughed at him.

McConnell's campaign manager, Rick Renshaw, stood up at the back of the room and announced he and his candidate were leaving. "Two of these gentlemen put their lives in uniform in defense of their country, and they didn't do it to have the First Amendment stepped all over," Renshaw said. "We're out of here." McConnell stopped to deliver a comment to reporters: "This is the Nazi Gestapo that Richard Shelby represents." He repeated the same line to voters who came over to congratulate him. Smith, in a statement sent to a local political site, said, "I expected there would be hating going on afterwards and online. However, if you were there, you know who around you acted out."

Shelby's taking McConnell's challenge seriously. He contrasts himself with Mississippi Senator Thad Cochran, who won after being forced into a runoff in

2014, and with former Indiana Senator Richard Lugar, who lost his primary in 2012 to Richard Mourdock, a Tea Party-backed conservative. (Murdock ultimately lost the seat to a Democrat, Joe Donnelly.) "They may have been surprised by the unrest and turmoil," Shelby says. "I plan not to be a target."

He's already spent about \$9.2 million this cycle, more than in his last three campaigns combined. Much of the money paid for ads, including one reminding voters that he'd been able to get a constituent's son approved for burial at Arlington National Cemetery in less than 15 minutes. "Shelby is such an institution here," says Richard Fording, who chairs the University of Alabama's political science department. "He's

known for bringing a lot of projects to the state, a lot of federal money."

Shelby has also gone negative. His campaign has created [commanjon.com](#), a website targeting McConnell. "Jonathan

McConnell would say and do anything to get to Washington," the website says on its home page. Shelby says he shares the frustration of primary voters who wanted the Republican-controlled Congress to undo more of Obama's agenda: "I've tried to be an advocate of their frustration." One ad says Shelby "stands up to Obama every single day." The senator says he won't support a Supreme Court nominee getting a Senate hearing before a new president is elected. "I would oppose any nominee that the president put up, because it would tilt the court," Shelby says. "It would change America."

McConnell's campaign happily takes credit for forcing Shelby to the right. "You're not going to come out here and say, 'Obama's the president, he deserves to get his nominee through,'" Renshaw says. "He knows he'd be tossed out just for that." McConnell won backing from the conservative advocacy group Citizens United in January. "What Jonathan McConnell is doing is a

Overseas, Trump isn't always a huge success 30

Charlie Rose talks to former CIA chief Michael Hayden 31

Swaying the growing ranks of Puerto Ricans in Florida 33

service for America," says David Bossie, its president. "Incumbent politicians who have credible primary challengers will have to take that into consideration as they move forward on the Supreme Court—or don't."

McConnell says he thinks voters' enthusiasm for presidential outsiders like Ted Cruz and Donald Trump will trickle down the ballot: "I doubt they're going to cancel out their vote by voting for Richard Shelby, the quintessential politician, quintessential establishment candidate."

—Josh Eidelson, with Greg Giroux

The bottom line Senator Richard Shelby, facing a 33-year-old Tea Party challenger in the March 1 Alabama primary, is veering further to the right.

\$12.2
million

The balance of
Senator Shelby's
reelection campaign
account, vs. \$92,000
for challenger
McConnell

Environment

Hillary's Candid Camera Moment

► Climate activists get her to commit on video to a drilling ban

► "This is our moment, when we are much stronger" than oil lobbyists

Hillary Clinton has made protecting the environment a part of her platform since she announced her candidacy last June, when she talked about making the U.S. a leader in renewable energy. Her campaign chair, John Podesta, was the central architect of President Obama's strategy on climate change. Yet Clinton's willingness to accept campaign contributions from donors with oil-industry ties, combined with her long delay announcing a public position on the Keystone XL pipeline, has nurtured doubts about her candidacy among environmentalists.

Climate activists have been trailing Clinton since before she formally entered the race, posting videos to YouTube and Twitter of her saying she'll commit to specific policies. The tactic appears to be paying off: On Feb. 4, Griffin Sinclair-Wingate, a University of New Hampshire junior, pushed up to the stage after a

► Democratic debate between Clinton and Bernie Sanders to question the former secretary of state. "Would you ban the extraction of oil, gas, and coal on public lands?" the 21-year-old asked. "Yeah," Clinton responded. "That's a done deal."

The four-word statement, captured on video, was a victory for Sinclair-Wingate, a volunteer for 350 Action, a nonprofit advocacy group backed by California hedge fund billionaire Tom Steyer and others who promote renewable energy. Since July, the group has posted video of Clinton declaring her opposition to **Kinder Morgan**'s proposed Northeast Energy Direct pipeline, which would carry natural gas from Pennsylvania to Massachusetts. In another, she says there should be investigations into allegations that **ExxonMobil** suppressed decades-old climate change research. Exxon has denied the allegations.

Within 24 hours of her exchange with Sinclair-Wingate, Clinton doubled down, telling another 350 Action activist on camera that she wants to "impose

a moratorium" on oil, coal, and gas leases on public lands. "This is our moment, when we are much stronger than the fossil fuel industry," says Jason Kowalski, a spokesman for 350 Action, which has coordinated much of the video campaign. Once these discussions go behind closed doors, Kowalski says, "the lawyers and the lobbyists of the oil industry will outpower us."

Clinton spokesman Jesse Ferguson says Clinton "believes we should be on a long-term path to a future where there is no extraction of fossil fuels on public lands." Kowalski and others say Clinton's willingness to commit to specific positions has coincided with her rival's rise in the polls. Sanders won the New Hampshire primary on Feb. 9 and came within five points of Clinton in the Feb. 20 Nevada caucus. "He's made Hillary have to pay more attention to [climate change] than she probably would have if she were unopposed or just preparing for a fall campaign for the whole U.S.," says Robert Brulle, a Drexel University sociology professor who studies environmental movements.

A politician who regularly addresses environmental policy while campaigning is much more likely to claim a mandate to address climate change once in office, says David Goldston, director of government affairs for the Natural Resources Defense Council Action Fund, the political arm of the nonprofit conservation group. "From our point of view, the more the candidates are talking about all aspects of this issue, the better," he says. "That actually does tend to shape policy once they're in office, if they win."

350 Action says it plans to continue pressing Clinton to reject donations from fossil fuel interests and endorse bans on fracking. The group is the political arm of 350.org, a nonprofit founded by author and environmental activist Bill McKibben. It draws funding from an array of corporations and philanthropic organizations, including Steyer's personal foundation, which spent about \$60 million in 2014 backing candidates who took strong stands on climate change. Other donors include the Rockefeller Brothers Fund, the Streisand Foundation, **Patagonia**, and the Clif Bar Family Foundation.

To teach activists the art and science of bird-dogging a candidate, 350 Action conducts boot camps instructing them

how to go after a target, hone their questions, and make sure cameras are trained on a politician at the right time. Sinclair-Wingate went through a daylong training with 350 and has fine-tuned his tactics on the trail. After catching Clinton at several events, he decided to start sticking his hand out for a shake alongside everyone else on the rope line, to make it harder for her to avoid him. "I feel a sense of responsibility to be doing this," Sinclair-Wingate says. "I'm not the one being affected most by climate change, and the people who are don't have the same access and ability to change it that I do."

—Jennifer A. Dlouhy

The bottom line Climate activists backed by hedge fund investor Tom Steyer have recorded Clinton saying she'd ban drilling for oil on public lands.

Candidates

Trump Gets Lost In Translation

► The real estate mogul came out ahead, even as deals soured

► "I don't think there is a hotter brand in the world than... Trump"

Donald Trump promises that, if he's elected president, he'll apply his deal-making savvy to international relations. An examination of Trump's operations abroad suggests that, while he's made millions selling his name overseas, he's also chosen inexperienced partners, disappointed customers, and ended up in litigation. "Not everything is perfect," says Trump, the front-runner for the Republican nomination. "Sometimes you find out that people aren't what you thought they were, and sometimes you find out they are phenomenal."

One of Trump's early forays abroad was in Toronto, where he donned a hard hat in 2007 to mark the start of construction on a hotel-condo tower that would become one of Canada's tallest buildings. He licensed his name to Alex Shnaider, a Canadian billionaire who set up **Talon International Development** to build the tower. Shnaider, who'd made a fortune in the Ukrainian steel industry,

For the Record



A 350 Action volunteer asks Clinton to stop taking money from lobbyists for fossil fuel industries



Another volunteer, Adam Greenberg, asks Clinton to end all oil, coal, and gas leases on federal land



In Manchester, N.H., Clinton listens as yet another volunteer asks about energy-industry donations

Charlie Rose talks to...

Michael Hayden

The only man to run both the CIA and the NSA discusses Syria, the encryption standoff with Apple, and Edward Snowden's impact

With this agreement between Russia and the U.S. over a partial cease-fire in Syria, it's starting to look like a win-win for Putin, don't you think?

Let me play this out a little bit. You've got our secretary of state trying to move heaven and earth to stop the killing. But we're in the position of being the supplicant. [Kerry's] going to the Russians and the Iranians, "Please, we need a cease-fire." And let me tell you the sentence he then is unable to say: "We need a cease-fire. And if we don't get it, this is what we're going to do." He's out there flying without top cover, because everyone knows we're not committed to any more dramatic action in Syria.

"To be perfectly candid, we're better at stealing other people's secrets than anyone else in the world"

Edward Snowden is making noises about wanting to come back to the U.S. if he's given the promise of a fair trial. And he has a definition of a fair trial. He wants to able to use the public interest defense, which in essence means, "It really doesn't matter that I broke the law. I did a good thing, and I should only be judged on your appreciation of how good a thing I did." I guess that would be attractive to some people, but if you look at the American history of civil disobedience and you read Thoreau, it only becomes a morally justifiable act if you're prepared to pay the consequences.

that let him write about the ability of the NSA to intercept and penetrate the e-mails of the Syrian armed forces? They just change their behavior.

How would you characterize the damage Snowden caused the nation?

As I mention in my book [*Playing to the Edge: American Intelligence in the Age of Terror*], it's the single biggest hemorrhage of American secrets in the history of the republic. And 98 percent of what he released has to do with how America collects foreign intelligence. What civil liberties quotient was there in his giving a correspondent a document

You just watched Apple attorney Ted Olson defend the protection of customer data. Where do you stand?

My position is that with the FBI and others demanding that Apple universally enable backdoors in their devices to break otherwise unbreakable encryption, I actually side with Apple. On the grounds of security and safety, I think that's the best

choice. American security and safety, in this current cyber era, is better served with end-to-end unbreakable encryption.

But is a backdoor into all iPhones what the FBI is really after?

I'm not convinced that's what [FBI Director] Jim Comey is asking for. I think there are differences. And frankly, I'm willing, at the present time, to shade in the direction of the bureau's request here [for access] to this phone. [In a court document unsealed on Feb. 23, Apple said the FBI had requested access to at least 11 iPhones since September.] Otherwise, I think Tim Cook, who I've talked to about this in the past, is in the position of saying, "Apple under no circumstances will allow itself to cooperate with law enforcement"—which I don't think is a good position to be in.

Tell me about the state of cyberwarfare on the government level and the bargain the president struck with China.

Boy, we've done a lot in this area. We've organized powerful institutions to go ahead and work America's will in the cyberspace on both defense and offense. To be perfectly candid, we're better at stealing other people's secrets than anyone else in the world. But we self-limit. We steal secrets to keep our citizens free and safe. We do not steal secrets to make them rich. That makes us one of maybe four or five countries on the planet that limit themselves in that way. You mentioned Xi Jinping and President Obama's agreement. Xi agreed to the American definition of legitimate espionage. In other words, you don't use the power of the state to steal secrets for profit. We'll see what happens.

Is it easier to get information on a nation-state than it is on a group like Islamic State?

Absolutely. And in fact, the fundamental tectonic shift in global geopolitics is that the things that can primarily go bump in the night are not the products, any longer, of malevolent state power. They're the byproducts of state failure.

\$5m

Royalties reported from the **Trump Ocean Club** in Panama City



\$20m

Income claimed from **Trump Turnberry**, a Scottish golf course he bought in 2014 for about \$58 million



Includes a casino and shopping concourse

had never developed a major real estate project.

After extensive delays, the building opened in 2012. Occupancy didn't reach the Trump-Talon projection of 55 percent to 75 percent until room rates were slashed. About 20 investors sued Talon and Trump for suggesting in marketing materials that returns could run as high as 21 percent. In July an Ontario judge dismissed the case, saying the investors should have been more cautious. Two of the buyers are appealing.

Talon is trying to cancel its management contract with Trump and unload 280 remaining hotel-condo units, according to court documents. "Both Talon and the board want new management because they're not happy with the Trump management," says Symon Zucker, the lawyer representing Talon. "He's not providing the value. There are other brands that will enhance the property." In December, Trump asked a Toronto court to block Talon from terminating their deal; the two parties are now in mediation. Instead of seeing the project sold, "I'd rather buy it," Trump says.

As he was getting the Canadian project off the ground, Trump also turned his attention to Panama, where he agreed to license his name to the Trump Ocean Club, a hotel-condo complex in Panama City. Panama's then-president Ricardo Martinelli attended the ceremony when the building opened in 2011. The developer, **Newland International Properties**, agreed to a deal that could have earned Trump about \$75 million under a licensing agreement, based on sales price assumptions.

Newland had never

attempted such a big project, and construction was plagued by delays. By the time the Ocean Club opened in 2011, when the economy was still weak, the market was already flooded with high-end condos. Some buyers walked away from their down payments. Single-room units being offered for \$350,000 were reduced to about \$180,000.

Newland filed for bankruptcy protection in 2013 and has continued to struggle since reorganizing; in early 2015 it missed a payment to bondholders. Newland's Roger Khafif, the lead developer on the project, attributes the building's problems to the decline of the Panamanian economy. "It would have been much nicer and much better if we'd have finished the building before the crisis," Khafif says. "It probably would have been the best real estate project in Latin America."

In financial disclosure forms filed in connection with his presidential bid, Trump said the Panama deal generated more than \$5 million in royalties and \$896,440 in management fees from January 2014 to July 2015. The condo owners' association at the Ocean Club moved to dismiss Trump's management company last year, claiming it exceeded budgets and used condo fees to cover hotel operating costs. Trump, in response, is seeking \$75 million in damages through a claim with the International Chamber of Commerce court of arbitration in Paris.

In Scotland, rather than license his name, Trump invested his own money in golf courses.

In his candidate disclosure forms, Trump claimed income of \$20.3 million from Trump Turnberry, a course he bought for about £41 million (\$58 million) in 2014. Yet records filed with

"It would have been much nicer...if we'd have finished the building before the crisis. It probably would have been the best real estate project in Latin America."
—Roger Khafif

Companies House, the regulatory agency overseeing corporations in the U.K., show a loss of £3.6 million in 2014 for **Golf Recreation Scotland**, the registered owner of the course. There's a similar discrepancy with the accounts for two other courses. On his disclosure forms, Trump claimed income of \$4.3 million from Trump International Golf Links Scotland, a course he built north of Aberdeen; yet Companies House records show it lost £1.1 million in 2014, its third consecutive annual loss. In Ireland, Trump reported income of \$10.7 million from Trump International Golf Links in Doonbeg. The course, which he bought in February 2014, reported a loss of €2.5 million in 2014 to Companies House.

According to Trump, the reported losses are due to construction on the golf properties. He says he's spending \$58 million on Turnberry, which he closed last September for refurbishment. He also adds that he has yet to unlock the value in developing housing on the Scottish and Irish properties. "They're only losing money because they're not open," he says. In fact, his golf course and hotel in Aberdeenshire are open. So is his hotel in Ireland, though part of the attached golf course is under renovation.

Trump says the amounts listed in his campaign disclosures are based on "projected future income" from the golf courses. Campaign finance experts say the rules require candidates to report payments they've received, not estimates for future income. "This is supposed to be what you own and the income you made," says Larry Noble, general counsel at the Campaign Legal Center, a nonprofit watchdog group.

Trump says his business record speaks for itself. "I've done very well internationally," he says. "I don't think



Management fees earned from the **Trump International Hotel & Tower Toronto**

FOR THE PERIOD JULY 2014-JULY 2015, ACCORDING TO TRUMP'S PRESIDENTIAL CAMPAIGN FILINGS

there is a hotter brand in the world than the Trump brand." Whatever becomes of his presidential bid, Trump says he thinks it's all been worth it. "Generally, what I'm doing has been helpful for the brand," he says. "The heads of the countries all dig Trump."
—Stephanie Baker and Tim Higgins

The bottom line Trump claims he's profited on deals abroad, even where he's shown losses on paper or where projects have run into trouble.

Election 2016

The New Voter Pool in Florida: Puerto Ricans

► Candidates target arrivals from the island

► "These are the most swing voters in...the most swing state"

More than a quarter-million Puerto Ricans have moved to the mainland U.S. since 2008, an exodus driven by the island's faltering economy. About a third have settled in Florida, where there are now more than 1 million Puerto Rican-born residents—almost equal to the number of Cubans. The influx into the nation's biggest swing state has created a tantalizing prize for presidential candidates. Although Puerto Ricans traditionally lean Democratic, candidates on both sides are investing heavily in courting these newcomers, who, as U.S. citizens, are eligible to vote in Florida's March 15 primary and in the November general election.

In February, Hillary Clinton opened a campaign office in Orlando, at the heart of central Florida's Interstate 4 corridor,

where the Puerto Rican population is concentrated. Donald Trump's campaign sent volunteers there to distribute bumper stickers and lawn signs. Marco Rubio, who successfully pushed for a regiment of Puerto Rican veterans known as the Borinqueneers to be awarded the Congressional Gold Medal, also plans to open an office in the city. "The epitome of swing votes are Puerto Rican voters," says Christina Hernandez, a Democratic consultant who's worked for Clinton and President Obama. "These are the most swing voters in the most swing areas of the most swing state of the entire country."

The tug of war over the Puerto Rican vote has been quietly going on for years. In 2012 the Libre Initiative, a political advocacy group backed by the billionaire Koch brothers, opened an Orlando office offering English-language classes and discussions about how free markets and an evangelical faith reflect Puerto Rican values. Libre's Florida staff has grown to five from one in 2012, and it's opening a second office, in Tampa. In March it will make its first foray onto the island, hosting a booth at an exposition targeting Florida-bound residents.

A growing number of Puerto Ricans in Florida are registering as independents, says Mark Lopez, director of Hispanic research at the Pew Research Center. Unaffiliated Hispanic voters in the I-4 corridor have grown 16 percent since 2012, compared with a 9 percent increase in overall Hispanic registrations, according to state figures. "I've spent a lot of time in that community the last two years," says Florida Lieutenant Governor Carlos Lopez-Cantera, a Republican. "They want to make sure that they have a job and that their children can have a job. They want to make sure their kids get a great education."

The party is also tapping into the disillusionment of Puerto Ricans with their own island government, which is \$72 billion in debt and defaulted on some of its bonds in January. Five of the past six governors of Puerto Rico have been Democrats. "It's an easy story," says Bertica Cabrera Morris, a Republican consultant in Orlando. "You left Puerto Rico, your island paradise, to come here, and now you're going to support the party that screwed you?"

Democrats aren't letting Puerto Ricans go easily. In 2011, Obama became the first sitting president since John F. Kennedy to pay an official visit to the island, earning him a life-size bronze statue in San Juan. Clinton, who won the island's Democratic primary in 2008, visited in September; she's

secured the endorsement of Puerto Rican singer Ricky Martin. In February she publicly chided Wall Street for its unwillingness to let the island restructure its debt. "Holding the future of Puerto Rico

hostage to maximize profits for a group of hedge funds isn't who we are as a nation," she said in a statement.

In Washington, congressional Democrats are pushing to give the territory the right to file for bankruptcy protection. Republicans argue that the island should reduce spending and honor its debts to bondholders. With Congress deadlocked, Puerto Rico's future could be decided by the next president. That's not lost on Josany Cordero, a mother of three who's working at her aunt's restaurant in Kissimmee, south of Orlando, while she decides whether to move permanently from her home in Bayamón, near San Juan. She says she'd register as an independent and vote for Clinton: "I know this person will be good for the United States and help Puerto Rico."

—Lauren Etter and Bill Faries

The bottom line About 1 million Puerto Ricans live in Florida, including many recent arrivals who are being courted by presidential candidates.

February 29 — March 6, 2016

Someone Didn't Get the Memo

► Months ago, the White House said it would stand down on encryption backdoors. Whoops

► "The government's going to have to get over it. We had this fight 20 years ago"

Silicon Valley celebrated last fall when the White House said it wouldn't seek legislation forcing technology makers to install software "backdoors"—secret listening posts investigators could use to snoop on text messages, video chats, and other encrypted data. But while the companies may have thought that was the final word, the government was already working on a broad set of new ways to access information under digital lock and key.

In a secret meeting convened by the White House around Thanksgiving, senior national security officials ordered federal agencies to find ways to counter encryption software and gain access to the most heavily protected user data on the most secure consumer devices, which would include Apple's iPhone, say two people familiar with the decision.

The order was formalized in a confidential National Security Council memo outlining priorities and timetables. The memo directs government agencies to estimate how much money they'd need to develop new counterencryption techniques and to identify laws they may need changed to make more digital files accessible by intelligence and law enforcement agencies. The NSC decision shows the government was privately honing its weapons against

Silicon Valley's popular products despite public signs of rapprochement.

On Feb. 16 the public got its first glimpse of what those weapons may look like. A federal judge ordered Apple to create a special tool that would allow the FBI to bypass security protections on an iPhone 5C that belonged to one of the shooters in the Dec. 2 terrorist attack in San Bernardino, Calif., which killed 14 people. Apple Chief Executive Officer Tim Cook has vowed to fight the order, calling it a

"chilling" demand that Apple "hack our own users and undermine decades of security advancements that protect our customers." The order wasn't a direct outcome of the memo, but it's in line with the broader government strategy.

White House spokesman Josh Earnest says the government wants access to just one device and isn't asking for a broader redesign or security hole. (The problem with backdoors in computer systems is they're easy for hackers to exploit.) But security specialists say the case carries enormous consequences for privacy and the competitiveness of U.S. businesses—and that the previously unreported NSC directive shows tech companies underestimated the government's determination to collect data.

"My sense is that people have over-read what the White House has said on encryption," says Robert Knake, a senior fellow at the Council on Foreign Relations and a former White House director of cybersecurity policy. "They said they wouldn't seek to legislate backdoors in these technologies. They didn't say they wouldn't try to access the data in other ways."

What the court is ordering Apple to do, security experts say, doesn't require the company to crack its own encryption—which the company says



it can't. Instead, the order requires Apple to build a program that can change the permanently installed "firmware" on iPhones and iPads, giving investigators unlimited guesses at the terror suspect's PIN code with high-powered computers. Normally, iPhones let users with sensitive data set their devices to erase themselves after 10 consecutive failed logins.

Knake says the U.S. Department of Justice's narrowly crafted request shows the FBI possesses a deep enough understanding of Apple's security systems that it's identified potential vulnerabilities that offer access to data the company has previously said it can't get.

NSC spokesman Mark Stroh declined to comment on the memo. But he provided a statement from a senior Obama administration official asserting that it may be possible to limit the vulnerabilities added by the government's access to protected data.

The people familiar with the counterencryption directive say the NSC's Deputies Committee approved it unanimously. While the committee's roster changes depending on the subject matter, it typically includes at least a dozen subcabinet-level officials, among them the deputy attorney general, the vice chairman of the Joint Chiefs of Staff, and the deputy national security adviser.

Silicon Valley and Washington have nursed a mutual distrust over encryption for more than two decades. In the 1990s the Clinton administration tried and failed to install a backdoor in telecommunications networks. In that case the NSA developed a technology called the Clipper Chip, meant to be installed in all U.S. phones, faxes, and computer modems as an encryption tool with a government backdoor. Security experts found ways to hack the chip and assailed it as a violation of privacy. Ultimately it wasn't adopted.

The U.S.'s insistence on finding ways to tap into encrypted data conflicts with consumers' growing demands for privacy, says Ken Silva, former technical director of the NSA and currently a vice president at data manager Ionic Security. "The government's going to

How Apple Protects an iPhone

The FBI can normally access a phone's data with a so-called brute force attack, entering all the possible passwords until hitting on the right one. Apple's mobile operating system lets users guard against such attacks with a setting that erases a phone's data. The FBI is seeking a way around that protection.

What the
FBI wants

① A user can set an iPhone to wipe its data after receiving 10 consecutive incorrect pass codes.

Custom-built software to disable the kill switch

② The iPhone is set up so that the pass code must be entered by hand.

A software feature that lets agents attack a phone's pass code remotely, through Wi-Fi or Bluetooth

③ iOS adds an 80-millisecond delay between pass code attempts, meaning it would take

5½

years to try every possible six-digit alphanumeric combination on an iPhone 6S.

Remove the delays so brute-force attacks proceed much more quickly

have to get over it," Silva says. "We had this fight 20 years ago. While I respect the job they have to do and I know how hard the job is, the privacy of that information is very important to people."

The FBI will almost certainly seek more money and expanded legal authorization to track suspects and access encrypted data beyond San Bernardino, without the involvement of companies that make the technologies, several experts say. Intelligence services already have sophisticated tools for cracking encryption, and the White House's efforts will likely lead to broader use of those techniques throughout the government, even in ordinary criminal investigations that don't involve foreign intelligence or national security.

Apple infuriated law enforcement when it announced in 2014 that it would encrypt data stored on users' iPhones and iPads with a PIN code even the company itself couldn't crack. Before then, the FBI and local police routinely sent seized devices to Apple to extract data relevant to their investigations.

Creating hacking tools is simply a matter of money and focused effort, says Jason Syversen, a former manager of advanced cybersecurity programs at the Defense Advanced Research Projects Agency. "My guess is you could spend a few million dollars and get a capability against Android, spend a little more and get a capability against the iPhone. For under \$10 million, you might have capabilities that will work across the board," says Syversen, now CEO and co-founder of cybersecurity

contractor Siege Technologies.

Apple officials appeared to believe their enhanced encryption would end the efforts of any government to compromise the security of their customers. Instead, the FBI has outlined in court documents several ways to bypass that encryption. "Apple has two options now: They can go back to the judge and say this isn't possible. Or they can service the warrant," says James Lewis, a senior cybersecurity fellow at the Center for Strategic and International Studies in Washington. "I don't think they can say it's not possible, because it looks like it is."

—Michael Riley and Jordan Robertson

The bottom line A confidential NSC memo shows that the government wasn't serious about backing off its encryption-breaking efforts.

Semiconductors

Intel and Samsung Are On a Collision Course

► The leading chipmakers push into each other's businesses

► "It's been coming to a head for the past couple of years"

During this year's Super Bowl, the ad making the biggest statement was well beyond the walls of Levi's Stadium. Throughout the big game, attendees and some eagle-eyed TV viewers could see pitches for Samsung's memory

Technology



36

Startups Keeping Their Cool

Proof that entrepreneurs will do almost anything for funding: In early February, representatives of 20 startups from around the world traveled to Finland as finalists in Polar Bear Pitching, one of two annual competitions run by Midnight Pitch Fest, a nonprofit event organizer. Each finalist jumped into an ice hole and, submerged in frigid water, presented to a jury of potential investors. "My adrenaline was running so high, I totally forgot the icy water," says Tuija Kauppinen of health-food company Arctic Warriors. Norway's FlowMotion Technologies won the €10,000 (\$11,000) top prize for its GoPro stabilizer. —Photographs by Aapo Huhta



❶ The "J-Bear"—the word for polar bear in Finnish is "jääkarhu"—is the event mascot



❷ Among the spectators were former engineers at Nokia, whose mobile phone division once called Oulu home



❸ Charles Adams Jr., U.S. ambassador to Finland, joined Canada's ambassador (not pictured) to open the show

❹ Omodara Gbotemi of Finera Energy, which designed a sustainable generator

◀ chips and processors—not within the stadium, but on a giant display almost 2 miles away. Samsung turned the top two floors of its new Santa Clara chip-making headquarters into a makeshift digital billboard measuring 30 feet by 300 feet. Along with the Denver Broncos and Carolina Panthers, one other important group could see its ads: anybody an additional mile beyond the Super Bowl, at the headquarters of **Intel**.

For 40 years, Samsung's semiconductor operation has been looking up at Intel's. These days, though, it's more of a sidelong glance. Intel remains the world's No. 1 chipmaker, and in some ways is stronger than ever, supplying processors for 99 percent of the world's servers and 95 percent of laptops. But Samsung has solidly established itself as No. 2 in the past few years by taking control of the faster-growing memory chip business. (Intel more or less abandoned that line in 1985.) For the first time, the two companies are beginning to seriously eye each other's customers.

Late last year, Intel said it would spend as much as \$5.5 billion to jump back into production of modern memory chips at a plant in the Chinese city of Dalian. "This is probably one of the first memory investments we've made in our Intel factories in quite a few years," Chief Executive Officer Brian Krzanich said on a November call with investors. In an interview, Kelvin Low, Samsung's senior director of foundry marketing, says his company is gearing up to produce two big sets of server chips using "the most advanced techniques"—meaning they're intended to compete with Intel's. "We are proactively entering that space,"

he says. "The reasons are obvious." Samsung declined to comment specifically on competition with Intel, which declined to comment for this story.

The chipmakers' strengths complemented one another when the PC was the primary means of computing and getting on the Internet and there was plenty of growth to go around. In the mobile era, upfront manufacturing expenses have grown so large that any effort to set up a product line has become a serious risk. "It's been coming to a head for the past couple of years, and it's going to accelerate," says Shane Rau, an analyst for market researcher IDC.

A new chip plant with the latest production equipment costs as much as \$10 billion, researcher IHS estimates. Most of that money goes toward the machinery, which becomes obsolete within five years and must be replaced if companies want to remain competitive. Adding pressure, device makers want fewer suppliers to provide them with more pieces of the final product, ideally fused together.

Samsung has turned some of these problems to its advantage by striking deals to produce chips designed by **Apple** (for the iPhone) and **Qualcomm** (for most every phone). Low says the company has already signed contracts to make server chips, but he wouldn't name any customers. Intel has had a tougher time breaking into mobile—its chip revenue declined 2 percent last year, while Samsung's grew 20 percent. "Historically, Intel has had a huge R&D budget that couldn't be challenged by anybody," says IHS analyst Len Jelinek. Samsung's budget, he says, represents the first real "competitive effort."

Quoted

"I think of my baby daughter, and I want to remember how she takes her first steps. I want to remember the whole scene."

Mark Zuckerberg, pitching the 360-degree feature of Samsung's new virtual-reality camera onstage at Mobile World Congress in Barcelona on Feb. 21.



That doesn't mean it'll be easy to take on Intel, which has only gained ground in servers and PCs. Intel's Krzanich said in November that his company's supply of hard drives made of memory chips, part of a venture with chipmaker **Micron**, has helped boost profits. The company is also promising a new type of memory that's faster than today's flash chips.

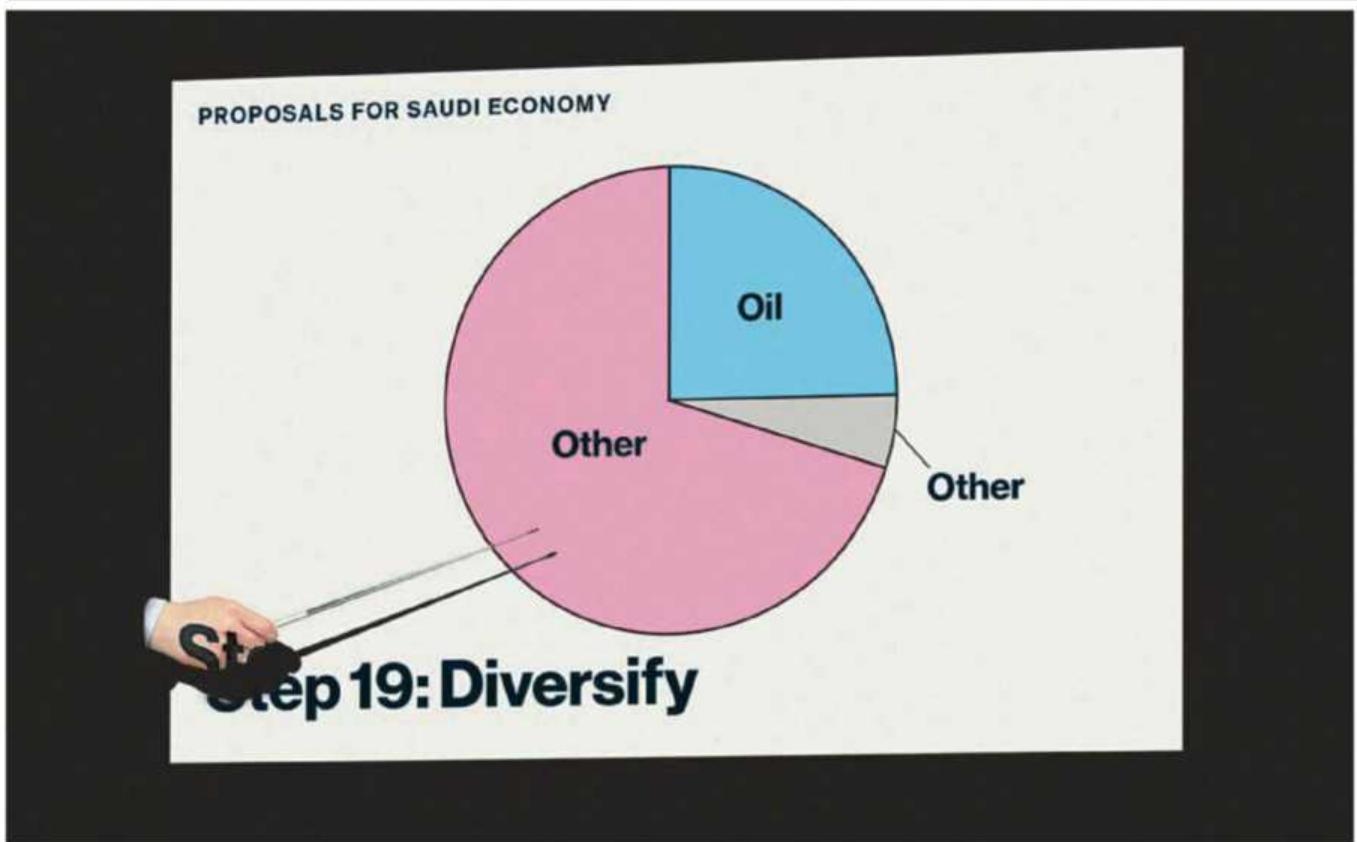
Down the road, the big question is whether one company can better prepare for the wave of Web-connected appliances and vehicles known as the Internet of Things, says Lee Seung Woo, an analyst at IBK Securities. "All chipmakers are trying to make everything for when IoT eventually kicks off," Lee says. "I don't think they can start from scratch and outrun each other in their respective dominant territories."

For now, Intel and Samsung are each spending \$12 billion a year on research and development as they try to set the pace in devising faster, smaller, more efficient chips. (An undisclosed portion of Samsung's R&D budget also funds work on its screens.) Intel is working to introduce its latest mobile chips and modems without the kinds of delays common in the last decade, according to Krzanich. Samsung's goal is to overtake Intel in chip sales. "It's difficult to say when we'll achieve our goal," says Kim Ki Nam, Samsung's head of logic chips. "We still have a big gap. They're a good company." But make no mistake: That is the plan.

—Ian King and Jungah Lee

The bottom line Intel and Samsung are positioning themselves for bites at each other's primary chip markets.

February 29 — March 6, 2016



► Cheap oil means Saudi Arabia has to change. Enter the consultants

► "There's a lot more action around initial public offerings and privatization"

A new security checkpoint has been installed at the usually quiet Al Khuzama Center office building in the heart of Riyadh. A guard stops visitors to ask, "Which ministry are you with?"

Inside, the lobby is full of Saudis in traditional dress and foreigners in suits and ties working on laptops and holding impromptu strategy meetings on large leather sofas. Huge Arabic-language posters hanging on the walls are loaded with buzzwords: empowerment, ambition, change, rationalization, and sustainability. Government agencies have staked out office space throughout the building, with the Ministry of Economy and Planning on the top floor.

This is the center of a new boom for consultants in Saudi Arabia. With crude trading below \$35 a barrel for most of 2016 so far, the kingdom, which derives 73 percent

of government revenue from oil, is looking for a new business plan—or, as officials call it, a National Transformation Program, which could be unveiled as soon as March. And much as when a big company finds itself eager to catch up with a changing world, firms including **McKinsey** and **Boston Consulting Group** are lining up to offer advice for a price to the Saudi government and businesses.

The country is the fastest-growing large market for management consultants, which are set to collect fees of \$1.3 billion in Saudi Arabia in 2016. That's an increase of 60 percent from four years ago, according to estimates from London-based Source Global Research, a firm that tracks the industry. "The opportunities for consulting firms are huge," says Jodi Davies, general manager of Source Global Research in the Middle East.

"Consultants are working to transform an entire country."

There's urgency to the task. As recently as late 2014, oil traded at more than \$90 a barrel. To adjust to the sharp drop, the government has had to cut spending, delay projects, tap foreign reserves, and issue debt to pay for a budget deficit that Riyadh-based Jadwa Investment projects will reach almost 18 percent of economic output this year. The new plan for the economy, say people familiar with it, will look for ways to attract private investors and hold ministries more accountable. It's also expected to look for ways to diversify beyond oil.

Among the consultants spotted at the Al Khuzama Center was Gassan Al-Kibsi, a Yemeni national and Massachusetts Institute of Technology grad who's leading McKinsey's work with the Saudi government, according to one person

who attended meetings there. BCG, meanwhile, is seeing “healthy double-digit growth” in its Saudi Arabia business, says Joerg Hildebrandt, managing partner for the Middle East. BCG opened an office in Riyadh in October and plans to hire more staff, he says. **Oliver Wyman** and **Deloitte** are also active in the kingdom, say executives at those firms. McKinsey declined to comment on its contracts. In a December report, it said Saudi Arabia needs public and private investment of \$4 trillion to boost productivity and jobs, and couldn’t wait for oil prices to recover.

Some consultants are working with companies to reduce costs. The oil crash is causing a lot of “stress in the market, particularly among contractors and the construction supply chain,” says Ben Hughes, Dubai-based director for capital projects at Deloitte. That company is drafting consultants from its European offices to fly in for Saudi projects.

Also, says Hughes, “there’s a lot more action around initial public offerings and privatization.” In January, Deputy Crown Prince Mohammed bin Salman, son of King Salman, suggested that the giant state-owned oil company Saudi Aramco could sell shares in an IPO. Officials are weighing plans to sell assets such as hospitals and airports.

BCG is working with the country’s Public Investment Fund to help start a state-owned mortgage firm, similar to Fannie Mae and Freddie Mac in the U.S., to help develop a secondary market for home loans and encourage homeownership, people with knowledge of the plans said in November. Saudi Arabia has one of the world’s lowest rates of mortgage borrowing.

One hitch for the consultants, says Hughes, is that so many are jostling for business that “it’s a buyer’s market.” Fees aren’t as rich as in some other countries in the region.

But there should be plenty of work to do. Saudi Arabia has a huge population of young people it needs to keep employed. “Because of the demographic pressure and the ticking clock

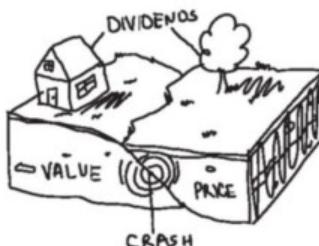
“Consultants are working to transform an entire country.”
—*Jodi Davies of Source Global Research*

on oil prices, Saudi Arabia’s change is being accelerated,” says Jonathan Woetzel, director of the McKinsey Global Institute, the research arm of the consulting firm. “A transition in the economic model that had been expected to take 10 or 20 years is now expected to happen in just three to five.” —*Stefania Bianchi, Matthew Martin, and Vivian Nereim*

The bottom line Consultants have descended on Saudi Arabia to offer advice on cost-cutting, privatization, even the housing market.

Hedge Funds

Bill Miller Looks for Signs of Disaster



► **He’s using earthquake modeling tools to forecast market risk**

► **“I’m surprised somebody is still messing with that stuff”**

When pitching investors, you normally don’t want “hedge fund” and “earthquake” in the same sentence. But Bill Miller, a once-dominant money manager known for quirky thinking, is starting a fund that will make bets based in part on a computer model designed to predict natural disasters.

Called Seismic Value Partners 1, the fund marks Miller’s first foray into hedge funds after decades managing mutual funds at Legg Mason. He won approval last month from the Securities and Exchange Commission to open **Miller Value Partners**, a money management firm that will oversee his hedge funds. As of a December SEC filing, no money had been raised for the initial Seismic fund.

Miller has licensed a computer

Bonds that all but guarantee a loss are in demand 40

What bears repeating, according to the Oracle 40

Bid/Ask: LSE and Deutsche Börse’s \$30 billion flirtation 41

model from **OpenHazards Group**, a Davis, Calif., company run by engineers, mathematicians, scientists, and business executives. The idea is to apply the mathematics of forecasting the probability of seismic activity to the chances of a stock market crash.

Like severe drops in the exchanges, “earthquakes are extreme events,” says Lisa Rapuano, who helped Miller run the Legg Mason Special Investment Trust mutual fund during the 1990s. “This has the potential to help Bill avoid big mistakes, which is one of the downsides of his investment style.”

Miller declined to comment. A decade ago, he was among the best-known and most-admired stock fund managers in the world, thanks to an astonishing winning streak. His Legg Mason Value Trust fund beat the Standard & Poor’s 500-stock index for 15 consecutive years, from 1991 through 2005. By 2008, when the crisis hit, the fund was heavily invested in financials. It lost 55 percent that year, vs. a 37 percent loss for the S&P 500.

The notion of sidestepping a big loss like that holds an obvious appeal. But some scholars dismiss the idea of applying an earthquake model to stock-picking. “I don’t think it has diddly to do with financial markets,” says Joseph McCauley, a physics professor at the University of Houston and author of *Dynamics of Markets: Econophysics and Finance*. “I’m surprised somebody is still messing with that stuff.”

OpenHazards Chairman John Rundle, a well-known seismologist who teaches physics and geology at the University of California at Davis, has been adapting his theories on natural disasters and financial markets with help from members of the Santa Fe Institute, a nonprofit research organization where Miller is chairman emeritus and the largest donor.

Miller’s fund will use signals from the model to make daily determinations on whether to purchase or sell short securities that mirror the performance of the U.S. stock market, such as the SPDR S&P 500 exchange-traded fund, according to regulatory documents. The goal is to outperform the S&P 500 over periods of a year or more ►

with less volatility. Miller will likely employ the model as an “overlay” to individual stock picks, Rapuano says.

The concept that seemingly unrelated catastrophes, from extinctions to avalanches to market crashes, might follow similar underlying patterns dates to the 1980s, when the late Danish physicist Per Bak began writing on the subject. “It’s something everyone would like to do, but it is inherently close to impossible,” Gene Stanley, a physics professor at Boston University, says about trading stocks based on such models. Knowing the probability of a crash is not the same as knowing the timing.

Miller has long been known for his unusual approach to investing. At Value Trust he looked for stocks trading at a discount to their intrinsic worth, a classic value investment approach. But he merged that with other ideas. He was an investor in Amazon.com at a time when most value managers thought the company was overpriced using standard growth expectations. But he and Rapuano developed a model for how Internet businesses might grow based on ideas they had picked up via the Santa Fe Institute, Rapuano says.

After 2008, the Value Trust fund trailed the index in two of the three ensuing years. Miller stepped down as its manager in April 2012.

He rebounded running the \$1.3 billion **Legg Mason Opportunity Trust**, generating average annual returns of 26 percent from 2012 through 2015. In 2016, however, he’s suffered, losing more than 18 percent so far, compared with a 5.3 percent loss for the S&P 500.

Miller runs Opportunity Trust through **LMM**, a Baltimore-based investment adviser he owns with his son and Legg Mason. A Legg Mason

spokeswoman says Miller’s arrangement with LMM is unchanged.

John Seo, co-founder of Fermat Capital Management, which buys insurance company bonds with payoffs linked to catastrophes, says he can see a broader use of earthquake modeling. While traders often have extensive data on how their portfolios would perform in a market crash, they seldom know how likely such a downdraft would be. “That’s where the earthquake guys come in,” Seo says. “They’re good at assigning probabilities.” —Miles Weiss

The bottom line A fund manager famous for big wins and a huge loss has a complicated idea for trying to take crashes out of the equation.

when the price is higher than all future interest and principal payments. In Germany, surging demand for two-year government debt has pushed yields to -0.53 percent per year, meaning an investment of €10,000 would pay back only €9,894. The average yield on all €1.1 trillion (\$1.2 trillion) in German bonds was sub-zero every day for more than two weeks as of Feb. 23. That’s the longest stretch of money-losing rates ever, according to Bank of America. In Japan, bond prices are so high that almost two-thirds of government debt, amounting to \$4.5 trillion, has a negative yield, according to data compiled by Bloomberg.

Behind the low rates are fear and growing skepticism that central banks’ dramatic rate cuts will be enough to reignite the global economy. Worries over the economic health of China and the U.S., plus volatility in stocks and oil prices, have many investors looking for safe assets. Even with slightly negative yields, the bonds issued by Germany and Japan at least offer liquidity and the assurance that they won’t default.

“Risk-free now has a cost,” and clients are learning that they should accept it, says Mauro Vittorangeli, a senior fixed-income money manager at Allianz Global Investors, which oversees about \$505 billion in assets.

The low rates also suggest markets see little risk of a spike in inflation, which would make holding negative-yielding bonds even more painful—and likely prompt central banks to raise rates and thus make existing bonds less valuable. (Even government bonds that won’t default can lose market value before they mature if rates rise.) A majority of economists in a Bloomberg survey say negative rates will be in place at the European Central Bank at least until the first quarter of 2018, and at

Negative Rates

Learning to Live With Money-Losing Bonds

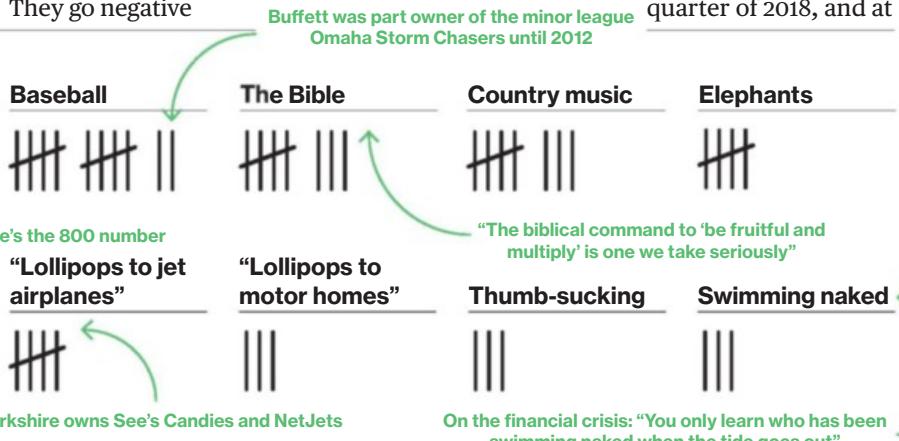
► **Investors in Europe and Japan are paying up for safety**

► **“At the moment there seem to be few alternatives”**

It’s not as if Christoph Kind relishes putting his clients’ money into bonds that pay nothing in interest and can all but guarantee losses. But Kind, the head of allocation at Frankfurt-Trust Asset Management in Germany, is doing just that. And he’s hardly the only one.

In Europe and Japan, central banks have set some rates below zero—an idea that’s hard to get one’s head around. But negative yields for bond investors have already become an everyday reality.

Yields fall when bond prices rise. They go negative



Buffettisms

Recurring themes and phrases in 15 years of Warren Buffett’s Berkshire Hathaway shareholder letters. The next one is due on Feb. 27. —Lily Katz



Need car insurance? Here's the 800 number

Geico plugs

“Lollipops to jet airplanes”

Berkshire owns See's Candies and NetJets

On the financial crisis: “You only learn who has been swimming naked when the tide goes out”

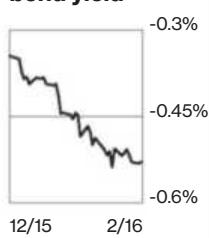
the Bank of Japan even longer.

"This is quite a tricky situation," says Frankfurt-Trust's Kind. He worries that with bond prices so high, investors are vulnerable to a selloff if the consensus on future rates and inflation proves wrong. Still, Kind has bought negative-yielding bonds in recent weeks. "It's tough at these levels, but at the moment there seem to be few alternatives," he says.

Consider the case of U.S. Treasuries. David Ric, head of absolute-return fixed-income strategies at the asset manager Amundi, calls them "the least ugly duck out there." Federal Reserve Chair Janet Yellen bucked the trend among central banks by raising short-term rates in December by 0.25 percentage points from near-zero. Even so, 10-year U.S. debt yields only 1.7 percent, down about half a percentage point since the start of the year.

That's much better than the

Two-year German bond yield



0.14 percent investors are getting for 10-year German bonds—until currency exchange is factored in. Treasuries gained about 1.1 percent in February, but Europeans holding them lost 0.77 percent in euros as the value of the dollar fell.

It's possible to use hedging contracts to eliminate such currency risk, but the cost of doing so results in a return that's no better for Europeans than buying German bonds.

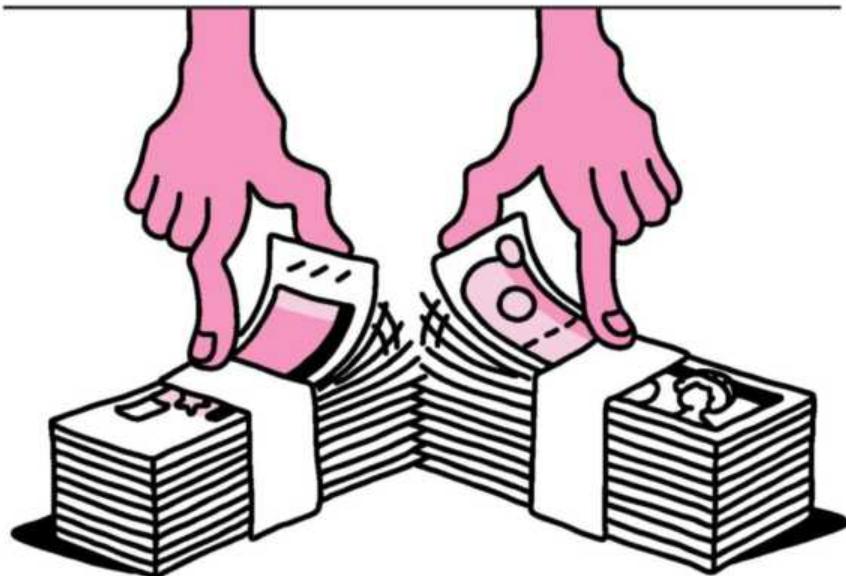
Japanese investors face a similar lack of options. Factoring in assumptions about future interest rates and foreign exchange, a Bloomberg analysis shows that 10-year U.S. Treasuries are likely to yield -0.7 percent in yen. For now, that leaves European and Japanese investors facing the prospect of losing money in order to save it. Says Allianz's Vittorangeli: "We are in a totally new world."

—Lukano Mnyanda and Eshe Nelson

The bottom line Investors are willing to pay so much for some government bonds that they are locking in a negative return.

Bid/Ask

By Kyle Stock



\$28b

London Stock Exchange talks merger with Deutsche Börse. Never mind Brexit...here comes a deal to create the dominant securities exchange in Europe. The exchanges are also publicly traded companies themselves, and shares of both soared on the news of the talks. The tieup would be an all-stock deal, with Deutsche Börse stockholders getting 54.4 percent of the combined company.

\$15.8b

Western Digital reprices an offer for SanDisk. The disk-drive maker cut its bid by \$3.2 billion. The move came after Tsinghua Unigroup backed out of an investment with Western Digital.

\$1.8b

Verizon Communications bulks up on fiber. It bought the network business of Carl Icahn's XO Communications, acquiring 20,000 miles of long-haul fiber-optic routes.

\$1.3b

EFG International buys BSI. EFG becomes the fifth-largest wealth manager in Switzerland. BSI was owned by Brazil's BTG Pactual, whose founder was arrested in a corruption probe.

\$897m

MKS Instruments acquires Newport. Both companies make tools for chip and microelectronic factories. Newport specializes in lasers that help align precise machinery.

\$473m

A poker king cashes in. Len Ainsworth sold his 53 percent stake in Ainsworth Game Technology to Novomatic. He said he'll use part of the take to fund medical research.

\$1.5m

NFL salary caps rise. Each team's pay cap will go up next season, to about \$156 million, after an arbitrator ruled the league withheld some ticket-sales revenue from the players union.

28¢

Uber jumps on motorcycles. The ride-hailing service began offering lifts on two wheels in Bangkok with fares starting at 10 Thai baht. Its rivals include Asian companies Grab and Go-Jek.



Revitalizing downtown takes the same ingenuity as moving a bass guitar across town.

When Portland was ready for a new light rail system, they went to the people to crowdsource ideas. Ideas like adding more space for bikes, wheelchairs and guitars. Siemens not only builds custom trains designed for a city's unique needs, it keeps them running on time, efficiently and reliably—supporting commuters, neighborhoods and new businesses in Portland and around the country.

usa.siemens.com/ingenuityforlife



SIEMENS

Ingenuity for life



Getting to Know You

Expedia
has
bet

everything

on understanding the
psyche of the modern
traveler

By
Drake
Bennett

Photograph
by
Tina
Schula

6

In a Monday morning in mid-October, in a suburb of Seattle, a young woman named Megan went online to make some travel plans. She and her parents, along with her siblings and their spouses, wanted to go somewhere tropical in January, and in a flurry of texts and Facebook messages, Belize had emerged as the leading candidate. It had fallen to Megan, as it often did, to execute.

So, a little after 9 a.m., she typed the name of the online travel agency Expedia into her browser bar and began to explore flights.

Her preference was for Alaska Airlines—she'd had good luck with the carrier—but when she couldn't find anything, she started looking at American. She noticed there was only one ticket left for the least expensive flight, which caused her some concern. She grew more apprehensive as she noticed that the cheaper available flights had long layovers. Then she saw that some of the layovers were in Los Angeles, and she briefly considered a visit to Disneyland.

After eight minutes, without settling on a flight, Megan began to explore hotels. The photos from a “jungle spa” resort caught her eye—it looked adventurous but also pampering—so she was crestfallen when she noticed that it was booked up for the dates she wanted. “Oh, so sad,” she said softly. She looked through the reviews of another promising hotel and found it had no Wi-Fi, which wouldn't be a problem, but also ants, which would. She stumbled onto a review someone had written about going to a resort to recover after “a surprising end to a marriage engagement.” That bummed Megan out a bit.

Then she found what looked like the one. This hotel wasn't on the beach, but the reviews mentioned a spiral staircase, which sounded neat, and an on-site bakery. Megan loved bakeries. And it wasn't too expensive. She'd have to confirm with her family, she reminded herself, but it was pretty close to ideal.

At that moment, a disembodied woman's voice came over a speaker and told Megan she was finished. The voice belonged to an Expedia user-experience researcher named Susan Motte, who, with a team of programmers and designers from the company's hotel-shopping and activities-booking teams, had been sitting in the next room watching Megan through a two-way mirror. Megan, who actually was planning a family trip to Belize (and whose full name Expedia asked not to be used, for privacy reasons), had been invited to the Usability Lab at Expedia headquarters in Bellevue, Wash., compensated with a gift card, and asked to use the site as she would at home. An eye tracker mounted on the bottom of the computer monitor logged where Megan was looking on the screen at any given moment. Sensors on one side of her face measured the electrical impulses in two muscles—the zygomaticus major, which tugs the corner of the mouth into a smile, and the corrugator supercilii, which furrows the brow. Megan's emotions, manifested in infinitesimal changes in muscle fiber tone, had been playing out on a screen mounted on the wall in the adjoining room. A red waveform on a scrolling graph tracked her tension during the session, a green waveform below it, her delight.

All of her reactions, and her answers to the questions Motte asked as Megan used the site, went into a growing database. Expedia, the parent company of more than a dozen travel-oriented brands in addition to Expedia.com, is obsessed with figuring out how to make booking travel online more intuitive, more efficient, and more enjoyable. That means, among other things, understanding the psychodrama of trip planning: the shifting desires and paralyzing wealth of choices, the

unsettling gyrations in room rates and ticket prices, the competing demands of family members and budgets and schedules, the need to balance the thirst for adventure against the fear of Zika virus in Latin America or Islamic State in Europe.

There's a modest body of literature on the psychology of vacations, and one of its findings is that much of the pleasure comes from anticipation—a 1997 study found that people are happier thinking about a trip beforehand than when they're actually taking it. The goal of Expedia's usability researchers is not only to make Expedia's various sites and mobile apps more efficient but also to make them an extension of the vacation fantasies that are always running in the back of our heads.

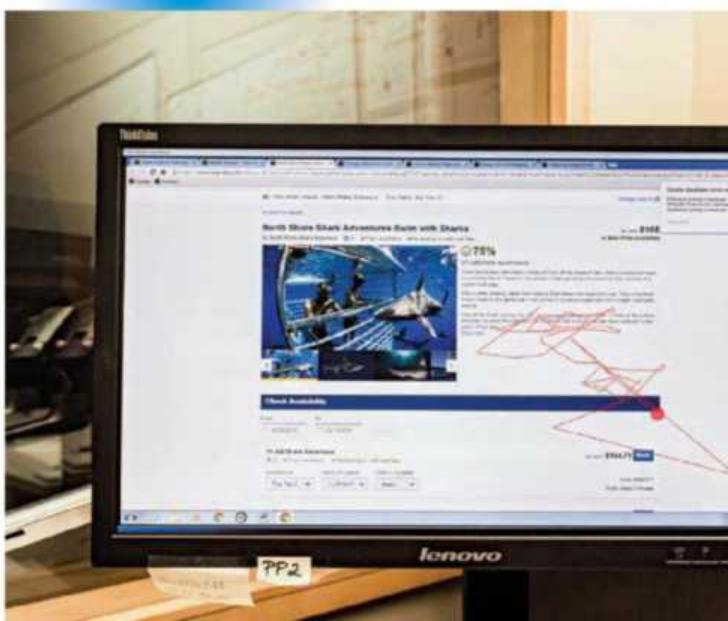
The basic act Megan performed under such close scrutiny plays out tens of millions of times a day—in homes, in offices, in line at the coffee shop on smartphones. In 2015 people performed 7.5 billion airfare searches and booked 203 million hotel room nights through Expedia and the other sites owned by the company—Hotels.com, the “meta-search” site Trivago, the business travel site Egencia, the discount site Hotwire, Australia's Wotif, and others. Over the past decade revenue has more than tripled, from \$2.1 billion in 2005 to \$6.7 billion last year, and the stock price has risen fivefold. Along with Priceline, whose sites include Priceline.com, Kayak, and OpenTable, Expedia dominates the online travel business.

Like Priceline, Expedia is a survivor from an earlier tech era—both date from the mid-1990s—but unlike contemporaries such as Netscape and Yahoo!, they continue to thrive. Both were fortunate enough to get big quickly in a business that benefits greatly from scale and brand recognition, and their growth over the past several years has correlated with a long, gradual economic expansion during which both vacation and business travel have steadily grown. Both have made big acquisitions—most of Priceline's growth has come from Booking.com, the dominant European hotel website, which it purchased a decade ago. Expedia, for its part, last year acquired the original online travel

company, Travelocity, for \$280 million, the upstart Orbitz for \$1.3 billion, and the vacation rental site HomeAway for \$3.9 billion.

What distinguishes Expedia is its dedication to understanding the psyche of the modern travel planner. That may be

▼In the
Usability Lab,
an eye tracker
traces what draws
a subject's
attention. ►The
observation room



most apparent in the Usability Lab, but much of it happens on the sites themselves, as the company relentlessly tests new ideas about look and feel and function. Expedia's leadership believes the resulting base of knowledge is what has allowed it to recover from earlier stumbles. It's also what they're banking on to keep the company growing in a more hostile climate, as investors worry about the threat of Airbnb, consolidation in the hotel industry, and the ever-present specter of Google moving into the travel business. Then there's the question of whether people are going to feel like traveling at all in what looks like a very tumultuous world.

Expedia wasn't originally an online travel agency. In 1994, Rich Barton, a young Microsoft engineer, was put in charge of a project to create an encyclopedic travel guide on the then state-of-the-art technology of CD-ROM. "I pretty quickly decided that was a dumb idea," he says. Barton persuaded Bill Gates to instead let him create a website where people could book trips rather than just research them. The travel technology company Sabre, which was owned at the time by American Airlines and handled reservations for many of its competitors, was working on Travelocity, and got to market first. But Travelocity, hamstrung by its airline ownership, was slow to move from flights into the higher-margin business of hotel rooms. In 1999, at the height of the tech bubble, Expedia was spun off, with Barton as CEO. Microsoft retained a majority ownership stake.

"It was really one of the first businesses to use the Internet as a service for consumers," recalls Barry Diller, now Expedia's chairman and senior executive. "I couldn't wait to buy it."

Diller had already run Paramount Pictures and Fox in his previous career as an entertainment mogul. In 1999 he was in the process, through a series of sales and acquisitions, of turning a collection of TV stations into an Internet company. USA Interactive,

The as it was called at the time, purchased Microsoft's stake in Expedia in 2002 for around \$1.3 billion, then bought the rest of the company the next year. In 2005, Diller's company, now called IAC/InterActiveCorp, spun off its profitable travel brands—Expedia, Hotels.com, TripAdvisor, and Hotwire—under the umbrella of Expedia Inc., with Diller retaining control of a majority of the shareholder votes.

The new Expedia struggled. Hotel and airline partners resented the company for the rates it demanded and started to take steps to circumvent it. Angered that consumers could often find lower prices on Expedia than on their own sites, some hotels ended their relationship with it. The major U.S. airlines started up a rival, Orbitz.

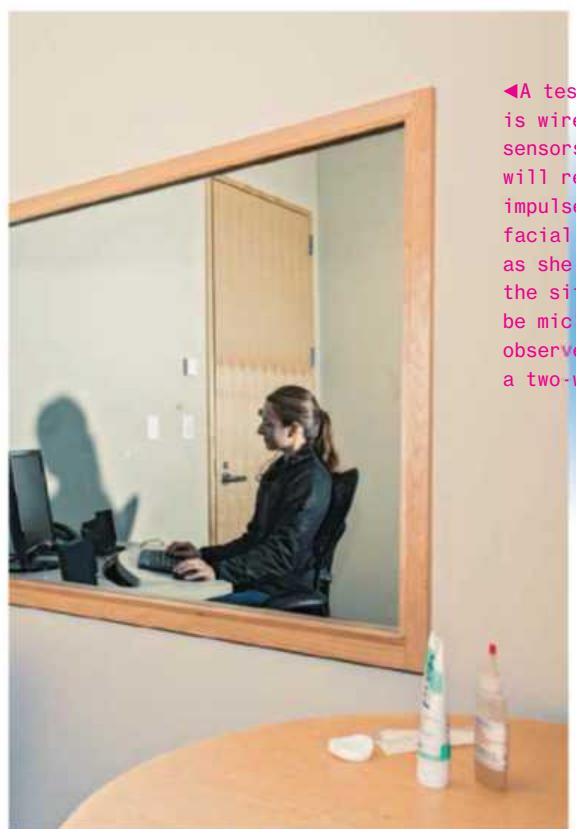
Most damaging, though, was the rapid rise of Booking.com and its competing business model. On Expedia, customers had to pay for hotel rooms when they booked. This so-called merchant model relied on buying large blocks of rooms at wholesale rates and marking them up. The margins were large; for the privilege of getting their wares into the giant global shop window that was

Expedia, hotels often had to pay 25 percent or more of the room rate. Booking.com, on the other hand, used what was called the agency model:

It allowed users to pay when they checked out (and it took a smaller cut in the form of a commission). When customers got a taste of that flexibility, they tended

47
that are always running in the back of our heads





◀A test subject is wired with sensors that will record impulses in her facial muscles as she navigates the site. She'll be mic'd up and observed through a two-way mirror

The problem is, purchasing the tickets and reserving the room

breaks the spell

to prefer it. With customers leaving, revenue stagnant, and commissions squeezed, Expedia in 2005 faced obsolescence.

The company's CEO, Dara Khosrowshahi, 34 at the time, was painfully aware that he didn't know exactly how the company should respond to its new troubles. The Iranian-born former investment banker, who'd been IAC's chief financial officer, decided he didn't have to. If Expedia could be remade as a different sort of company, its customers would provide the answers themselves. At the time, Expedia was centrally organized, in terms of both people and software. Technology decisions for all sites ran through one chief technology officer; marketing questions ran through one chief marketing officer. Each site was an interconnected tangle of code. If programmers wanted to add the ability to handle credit card billing in Germany, for example, that might end up causing errors in the flight-search feature. As a result, changes were rare: A site would be updated only a couple times a year. Each change "would break the system down between a week and God knows what," Diller says in an interview at IAC's Manhattan headquarters. "We couldn't change a Tuesday to a Thursday without thousands of hours of work."

Khosrowshahi made the case to Diller that the company needed to spend hundreds of millions of dollars hiring and equipping coders to do work that would be largely invisible to consumers. "We just had to go in and invest very aggressively without having a clear return on investment,"

Khosrowshahi recalls. Diller bought it, and he persuaded the board to buy it, too. The company's tech spending increased from \$130 million in 2005 to \$362 million in 2010—in 2015 it was \$750 million. Brand Expedia alone has increased its coding workforce since 2010 from 200 software engineers to 2,000.

Today each of Expedia's brands has its own technology and marketing teams, and they're encouraged to set their own course. They all benefit from the massive inventory of hotel rooms and plane tickets and the financial resources and technological firepower of the parent company. How they use all that is up to them. "They are competing against each other, they steal from each other," says Khosrowshahi. We're sitting in a meeting room near his desk at Expedia headquarters in Bellevue, next to a whiteboard that he gradually fills with drawings and charts. "Sometimes they do the same thing as each other, which is kind of a waste," the CEO concedes. "You know, they'll build the same exact feature twice. But the trade-off is speed."

The pace at which the sites evolve is paramount to him, and the most important

measure of it at Expedia is how many tests the software engineers run. The company's gospel is "test-and-learn," pronounced as a single three-syllable word. Also called A/B testing, it borrows the logic of pharmaceutical research: Test an innovation against the status quo and see if there's any difference. It's common practice at Google and Facebook, but it was relatively unknown in the online travel industry until Booking.com started using it. Expedia's commitment to the practice is quasi-cultish. In 2011, when the company's chief product officer, John Kim, started there, Expedia was running 50 to 100 tests a year. Last year it ran 1,750.

Today Expedians, as they call themselves, don't debate questions, they test them: How big should a button on the website be? Should hotel availability be presented in list form or calendar form? How likely is it that someone typing a particular travel-related search query into Google is booking a trip right then, and how much should Expedia therefore pay for an ad that will run in the search results page? What should the Expedia brand's loyalty program look like, and should Hotwire have one at all? Are people more likely to reserve a hotel room if they're shown how few are available at a particular price? (As it turns out, yes, even though they say they hate it.)

Expedia's decision, for example, to preserve the distinct brands it purchases rather than subsume them into the Expedia.com site was driven by research showing that even in the world of online comparison shopping, people retain stubborn brand loyalty. According to Aman Bhutani, president of the Expedia brand, the same person might shop for a cheap business hotel on Travelocity, a nicer hotel for a family vacation on Expedia.com, and a car rental on Hotwire, even though all three are Expedia sites offering identical inventory. In keeping with the radical agnosticism of the company, Bhutani isn't particularly interested in why that is. "I just want to know what you like and how many other people are like you so that I can provide those services," he says.

Two-thirds of the A/B tests Expedia runs show no effect or a negative effect, and most of the successful ones are only marginally so. "It's a game of inches," Khosrowshahi says. "What you have now is lots and lots of inches, and it adds up to very big numbers." This stockpile of technological and behavioral information allows the company to give its brands a far more nuanced understanding of what customers want and how to get them from window-shopping to booking. "The entire online travel market has improved its conversion rates," says Ryan Williams, an analyst at Millward Brown Digital, a consulting firm that tracks Internet use. "But Expedia's conversion improvement is outpacing the market."

Expedia sees its traveler-behavior data as a defense against superfluity. Despite its size and name recognition, Expedia doesn't have its own hotel rooms or its own airplanes. It's a middleman among other middlemen. Booking.com still has the bigger inventory of hotel listings; Google shows flight and hotel results right in the search page. Even TripAdvisor, spun out of Expedia in 2011, has become a major competitor by allowing visitors to book directly on its site. For Expedia to continue to justify its commissions and its existence, it has to be better than everyone else at divining vacationers' desires. That draws on both the steady churn of testing and learning and the more open-ended qualitative work in the Usability Lab, where researchers use terms like "delight" and "fantasy" in a clinical manner.

"We're doing more work to understand the dream state, the plan state," says Scott Jones, who runs Expedia's design

and user-experience department. "People are always planning a trip. They may not be actively shopping for a trip, but they've always got this idea in mind." The problem, as he sees it, is that purchasing the tickets and reserving the room breaks the spell. "Booking travel online has become so full of decisions and answering questions," Jones says. "People are always daydreaming about trips, but as soon as they come to our site, it becomes more of a work thing."

Every December the annual Expedia Partner Conference takes place in Las Vegas, the same weekend as the National Finals Rodeo. Cruise-line execs and car rental company reps mix along the Strip with honest-to-God cowboys and cowgirls. The conference is a chance for people who do business with Expedia to meet with one another and with the company's leadership. It's also a time for Expedia to convince all of those partners that the company's no longer the bully of a decade ago. Many of the new features Expedia is rolling out are for its suppliers, allowing them, for example, to monitor what sort of photos or descriptive language attracts the most Expedia users. For the past few years, Expedia has reduced commissions, sacrificing profits to increase its inventory by luring more hotels to work with it.

One of the conference's main events was a conversation between Khosrowshahi and Diller. At the front of a cavernous ballroom at the Bellagio Hotel & Casino, the two sat onstage in leather club chairs. Khosrowshahi wore tight jeans and a slim, short suit jacket; Diller wore a pinstriped suit, driving shoes, and no socks.

The talk ranged from the future of cable television to the health effects of Coca-Cola to Donald Trump—"an evil man," Diller called him. "I'm very proud that for 30 years I haven't spoken to him, because I've always disliked him." Midway through they turned to the question of whether people were too scared to travel. The preceding weeks had seen both the Paris and San Bernardino terror attacks. Islamic State was promising more. Trump was telling sellout crowds he wanted to deport 11 million illegal immigrants. In Europe, citizens were revolting against the idea of welcoming waves of Syrian refugees into their countries, and in the U.S., politicians and presidential candidates were rejecting the idea of letting in any at all. The world was feeling hunkered-down.

Khosrowshahi asked Diller what it meant for the travel industry, and the two started talking about Sept. 11. The attacks, along with everything else they wrought, caused people to stop traveling almost entirely for months. Diller was closing the purchase of Expedia at the time, and he and Khosrowshahi had debated whether to back out.

"We sat around and talked," Diller said into his microphone, "and I don't remember, you may remember who it was who said, 'If there's life, there's travel.'"

"I think that was you," Khosrowshahi interrupted.

"Oh," Diller said. "So nice to hear. I've always given credit to someone else."

It's a resonant line, and over the day and a half that remained of the conference, various Expedia executives worked it into their presentations. It's comforting to the company to think that the current trepidation about the world beyond one's borders will pass. It's comforting, too, to think of travel as a fundamental human activity, no matter what happens. Even among civilization's radioactive remains, *Mad Max* will need to get from one place to another. He might need to find somewhere to stay when he arrives. And if there's an on-site bakery, who's to say he won't want to know about it? **B**



BEAST OF NO NATION



CAN
STUART
BRAY
GET HIS
SOUTH
CHINA
TIGERS
BACK TO
SOUTH
CHINA?

BY KIT
CHELLEL

PHOTOGRAPHS
BY DAVID
CHANCELLOR

the highway south of Bloemfontein, South Africa, Stuart Bray sits in the back seat of a safari truck, sweating in jeans and boots in the 100-degree heat of a December afternoon.

Bray and his driver have just picked up two Chinese government officials from the airport, and now they're wedged in next to him, their expressions hidden by sunglasses. As they drive, the only landmarks are dusty sheep farms and the occasional ostrich.

Bray rides cheerfully until, an hour into the drive, his cell phone buzzes. A tabloid reporter is calling from London, the city where Bray lives most of the year and where he's getting a high-profile divorce. His wife has made another set of accusations in the multimillion-pound case. "No, it's not true that I don't like animals," Bray tells the reporter, irritated. "No, it's not true that I hate my wife's cats." It's impossible to tell if the Chinese are listening.

The phone signal dies as the truck enters a wind-blasted, rocky expanse of scrubland called the Karoo. After an awkward silence, Bray turns his companions' attention to the creatures they've come to see. "They could kill you just playing," he says. "If one wanted to hurt you, you would really be in trouble."

The truck approaches a 10-foot-high electric fence that stretches for miles into the distance, like something out of *Jurassic Park*. A sign on a gate, marked Laohu Valley Reserve, warns in Afrikaans that trespassers will be prosecuted. After stopping at a lodge, the vehicle continues down a dirt track that leads to more electrified fences. These divide slopes of dried grass into an uneven grid, each roughly the size of a football field. After a few more minutes, the truck stops next to the only building in sight, a hut with cage doors, and Bray and the Chinese get out.

Bray takes a breath. Even though he's been to this spot on dozens of occasions, he feels the same pricks of excitement every time he sees the figure in the grass: a 7-foot South China tiger, crisp black brush strokes on a coat of deep rust fringed with white, head held low, yellow eyes tracking the men through the fence. Her name is Madonna. She yawns, baring canines the size of small railroad spikes, and rolls onto her back with her paws in the air.

One of the Chinese officials, Lu Jun, squats down to take photos. The other, Zhang Dehui, points at Madonna's face. "Three stripes and one vertical," he says. "This is a Chinese character. Pronounced 'wong.' It means king." He sketches the symbol on a piece of paper.

Bray, 54, who is short and trim with neat, graying hair, looks skeptical. "Sometimes you can kinda see it," he says. Bray is eager to keep the Chinese happy. He runs the organization that owns the Laohu reserve, and Madonna belongs to one of the most critically endangered species on earth, one that the World Wildlife Fund considers "functionally extinct." None are believed to remain in the wild; perhaps 100 exist in captivity. Bray has 19 of them on his 74,000 acres. A 20th died the night before, after an encounter with a blesbok. He wants to re-wild the tigers, help them learn how to hunt and breed, and return them to the forests of southeastern China. Lu and Zhang have flown in from the State Forestry Administration in Beijing to talk about bringing Bray's tigers home.

Madonna watches the group with mild curiosity. Determining that no one is going to give her any food, she turns her head regally to watch the sun sink over the rocky cliffs and dried-up riverbeds of Laohu Valley.

Bray takes Lu and Zhang to the camp's main lodge, where rangers set out a simple dinner after nightfall. It's too hot to close the doors, so insects fly in from the darkness and swarm the lights as the men discuss the tigers' fate. Probably more

than any other person on the planet, Bray is responsible for whether the South China tiger survives or becomes extinct, a notion he finds as surprising as anyone else. Born and raised in America, he lives in London and maintains Belgian citizenship. A former executive at Deutsche Bank, his natural habitat is Wall Street or the Square Mile of London, where he spent a career in structured finance. Bray is happier talking about Black-Scholes options pricing than he is trekking through the bush, where flying bugs make him jump.

A hot wind rattles the windows of the lodge as Zhang, the director of his agency's wildlife conservation division, begins a series of toasts, as is Chinese custom, marked with shots of local liquor. In halting but clear English, he thanks Bray for his efforts at restoring a species on the brink. The next step, Zhang says, will be the hardest. Bray's charity has spent 10 years teaching zoo tigers how to hunt. If these potential man-eaters are to be sent to China, the government will need to relocate some of its citizens. In a nation of 1.4 billion, even the most remote nature preserves have some human settlements.

Bray says he wants 300 wild tigers in a sprawling habitat.

"We have to move the people," Zhang tells him. "China is not like South Africa. You are very ambitious."

Bray stares at him. "I have bet my whole life on this," he says.

In 1998, Bray was on vacation in Zambia with his girlfriend, Li Quan, when their guides on a walking safari led them straight into a pack of lions. Terrified and worried that Li might bolt, Bray grabbed her by the shirt collar. They backed out. Afterward, he couldn't stop laughing because of the adrenaline.

Li, a slender woman with expressive eyes, hadn't been scared. She'd always been fascinated by big cats and filmed the whole scene on her video camera. Born in China, she's one year younger than Bray. They met as graduate students at the Wharton School of the University of Pennsylvania in the late 1980s. Li later gave up a licensing job at Gucci to move to London and be with Bray, then a partner at Bankers Trust. She needed something to occupy her while he was out creating tax-focused securitization deals, and the safari episode, she'd later say, gave her an idea. What if she could bring African-style ecotourism to China, creating a habitat for endangered tigers and a source of revenue to help them thrive?

Bray was skeptical but vaguely supportive of conservation, and gave Li \$150,000 to start a charity, Save China's Tigers. Wary of being asked to write more checks, he told her, "This is a black hole that will consume infinite money and is doomed to fail."

Li spoke to someone she knew in the State Forestry Administration and found him surprisingly receptive to the idea of reintroducing the big cats to the country. The earliest known tigers lived in China more than 2 million years ago, and Neolithic people there carved figures of them into rocks to ward off ghosts, disasters, and disease. While the South China tiger once roamed a territory 1,200 miles wide, the species was all but eradicated by hunters during the "anti-pest" campaigns of Mao's Great Leap Forward, and its forest habitat was largely destroyed. There is a conservation movement in modern China, albeit a nascent one.

The SFA told Li that even if she were able to obtain and re-wild a sufficient number of tigers, it would be a while before there was anywhere suitable to put them.

That was a problem for the future. More pressing was that Li and Bray had no conservation experience, and the big wildlife protection groups didn't want to work with them. The pair were seen as rich dilettantes who might divert scarce funds from groups with more realistic projects. To boost credibility, Li approached John and Dave Varty, the South African big-cat experts and filmmakers, who were famous for operating a reserve where tourists pay to get close to tigers from inside cages mounted on trucks. Li asked the Vartys to work with Save China's Tigers, to help her find good land in South Africa and build a staff. Bray started to come around to Li's project. "I was impressed by Li's perseverance in the face of opposition from just about everyone," he says. "It began to feel like David and Goliath, and I had a lot of sympathy with David."

Bray had his own battles. In 1999, Deutsche Bank took over

Bankers Trust, and he started to war over tax strategy with a rising executive named Anshu Jain. Bray was fired in 2001; Jain went on to become co-chief executive officer. Bray tried to move his team to another company but couldn't pull it off; he decided he was finished with banking. "I was so sick of the politics and the infighting," he says. "I just didn't want to do that anymore." After two decades, he'd saved about \$25 million. Li remembers him being miserable. "He was lost and resentful," she says.

They got married in a small ceremony at a town hall near their East London home a month later, in August 2001. Li invited a handful of friends. No one came for Bray. "I was the only one who stood by him," Li says.

Without a day job, Bray began to think more about the tiger idea he'd once thought was doomed. The tiger, which kills by biting through the neck of its prey, remains a potent symbol of intelligence, power, virility, and elegance in China, and it's one of the 12 signs of the Chinese zodiac. Bray traveled to China with Dave Varty, where they researched ➔

THE TIGERS CAN HUNT, BUT MOSTLY
THEY FEED ON FRESHLY SHOT
GAME DELIVERED BY LAOHU RANGERS



the potential market for tiger tourism. Bray became convinced that saving the species could be not just virtuous but also lucrative. "Help nature, help communities, and make a profit," Bray says. "What's not to like?"

He bought an area about four times the size of Manhattan in the Free State province of South Africa and agreed to lease it to the Varty brothers, who would run the reserve. Li talked the Chinese government into sending them South China tiger cubs that had been bred in zoos. In 2002, Bray and Li were all ready to fly to Beijing to finalize the plan. At the last moment, according to Bray, the Vartys tried to change the deal. Bray expelled them from the project and set up his own charitable trust to take the brothers' place in their arrangement. The parties sued and countersued. John Varty, reached by phone in December, didn't want to discuss the dispute. "I've dealt with a lot of people in my life, a lot of rich people as well," Varty said. "Two of the most distrustful and evil people I have ever met in my life are Quan and Bray." Then he hung up.

(Varty was mauled and almost killed by one of his tigers in 2012.)

Li and Bray were on their own, with the first cubs due to arrive within a year. "We had very little time," Bray says. Li started trying to find scientists, rangers, and vets. They needed fences, enclosures, special cages for transport, live prey, and a plan for turning caged tigers into wild hunters, which many experts thought was impossible.

While Li was busy at the reserve, Bray turned to the two things he did best: litigation and securitization. As well as fighting the Vartys in court, Bray sued Deutsche Bank over stock options he wanted to access. Because they hadn't yet vested, he sought to sell options on the options. This made perfect sense in his mind, but Deutsche Bank wouldn't give him a clear answer as to whether such a transaction was allowed. Bray also began to ponder other ways to raise money for a project that was devouring capital. "I started to think about the tools that were available to me," he says. Characteristically, he came up with the most complicated solution imaginable.

SOUTH CHINA TIGER CUBS BORN IN ZOOS STRUGGLED
IN THE AFRICAN CLIMATE. SOME HAD NEVER
WALKED ON GRASS AND DIDN'T UNDERSTAND SHADE



Bray planned to raise as much as \$2 billion in this way: He'd create and then sell asset-backed securities, use the money to buy forestry assets in China, and then, with income from selling wood, repay investors in the original securities. Anything left over would go to the tigers, and a finance firm—which Bray set up—would get fees for arranging the deal.

"My friends thought I was crazy," Bray says. "In particular, some of the people I was trying to persuade to work with me thought it was crazy." Bray imagined something like a philanthropic hedge fund. If successful, it would make enough profit to pay for a tiger habitat in China and also give Bray and his staff the kind of compensation City of London financiers were accustomed to—as much as £10 million (\$14.5 million) a year for Bray personally. That would make him one of the best-

for a while until the bird got tired. "Once the chicken turned around and stared at them, they just stopped." Being faced down by poultry was a humiliating start to life in the wild for two young tigers. The team mixed chicken meat into zoo food to get the cats used to the taste, then introduced plucked carcasses, then dead birds with feathers on. Eventually, Cathay and Hope overcame their first live chicken.

Two more cubs arrived from China in late 2004. Madonna, who came then, got dehydrated after spending all day in the African sun. "There was shade available, but she was too naive to know how to use it," Bray says. Li stayed up all night offering water to the shaking, vomiting tiger.

A 4-year-old male called 327 arrived in 2007. He was used to life in zoos and never got comfortable outside. "You could see

"WE HAVE TO REVERSE THIS PROBLEM, NOT FOR ME BECAUSE I LOVE TIGERS, BUT BECAUSE I WANT THE PLANET TO REMAIN HABITABLE"

paid conservationists in history. Bray pitched Credit Suisse, Goldman Sachs, and ABN Amro, but none would agree to back the scheme.

In September 2003 handlers at the Shanghai Zoo put a pair of South China tiger cubs named Cathay and Hope into cages and flew them to Hong Kong. There, Li held a news conference with former Bond girl Michelle Yeoh, whom she'd enlisted as a charity patron through a fashion-industry friend. After another plane ride, the tigers arrived in South Africa, where Li introduced the cubs to more journalists at the National Zoological Gardens in Pretoria. "We have to take this drastic measure to save them from likely extinction," she told reporters and photographers. Cathay and Hope spent several weeks in quarantine at the facility, got treated for ringworm, and received a dental checkup before being delivered to Laohu.

A book released by Li years later describes the moment the cubs first set foot on semiwild African soil. "Li's heartbeat quickened. Yes! It could work, it was already working," reads the introduction. "Her delicate Chinese fists clenched with joy. Her critics were wrong. They were dull, unimaginative people who dared not dream." The reality was less inspiring. When Cathay and Hope arrived, they refused to get off the concrete foundation at the gate. They'd never walked on grass before. Laohu staff had to use a ball the cubs played with to coax them into their enclosure.

When it came to feeding, there was no guidebook for re-wilding a tiger. Hardly anyone had attempted it before. "This was all speculation until you actually try it," Bray says. The first time they put a live chicken in the enclosure, the cubs chased it around

by the way he walked," Bray says. Finally, 327 found his mojo by mating with one of the females; then, pumped up with macho pride, he picked a fight with another male and lost. His skeleton is mounted in a glass case in the reserve lodge.

Bray's legal problems got worse. The Varty litigation was costing \$1 million a year in lawyers' fees. A South African animal protection group sued one of Laohu Valley's managers, saying it was cruel to put living creatures in an enclosure for tigers to hunt. South African judges rejected the lawsuit in 2008, but by then Bray and Li were almost out of money. The tigers were breeding, and the project needed more fences for new enclosures to separate them, as well as more antelope for hunting practice. The worldwide financial crisis that year officially ended any interest from banks in Bray's forestry-finance idea.

Just when the project needed it most, there was an unexpected windfall. While Bray was fighting with Deutsche Bank over his options, the bank put out a news release. Bray claimed that it implied his old division was caught up in a U.S. tax probe, which wasn't the case, and he sued for libel. The suit, along with the stock dispute, was settled out of court. In 2009 he arranged for Deutsche Bank to pay £20 million to a Save China's Tigers charitable trust as a tax-free donation. The same year, Bray gave up his American citizenship and became a Belgian national, saying he didn't want the organization to face onerous U.S. taxes.

Amid the lawsuits, the money troubles, and the difficulty of what they were attempting, Li and Bray's relationship began to rupture. Li saw herself as the charity's figurehead, but her style irritated Bray. She created Twitter and Facebook accounts for the tigers. The book she released in 2010, based on her diaries, described tigers with smiles on their faces, and love triangles, jealousies, and heartbreaks when they mated. Bray thought all this undermined the project's credibility.

They went to counseling, but the arguments got worse. Li said Bray became emotionally abusive; Bray said Li

threatened to tell the Chinese government there was something shady about the Deutsche Bank settlement.

Bray removed Li from the charity in 2012. She filed for divorce in London 10 days later. They've barely spoken since. Li signs off e-mails to Bray with "wrath of the tigress whose baby has been taken away."

Li climbed into the witness box of a wood-paneled London courtroom on Dec. 17, 2013, to testify in the divorce. She was surrounded by at least a dozen red folders full of evidence, and behind her the court walls were lined with law books, some more than a century old. Her husband sat a few feet away in the front row. Wearing a silver tiger belt buckle, Li sobbed as she spoke. When they founded the charity in 2000, Bray thought of the tigers as her "little hobby," she said. She'd been forced out after devoting 13 years of her life to an animal she loved. "I intensely hope I can continue my work."

The court had to resolve an important financial issue before it could grant a divorce. Li argued that a trust holding the Deutsche Bank money was for the couple's benefit, as well as for the tigers—a so-called marital asset to which she was entitled. Bray argued that the funds were exclusively for the charity.

It quickly became clear how far Li was willing to go to win her case. She described living well on the charity's funds. "I bought furniture, we had expensive dinners, we had expensive wines," Li said. There were rented sports cars and a wall mural. The

"These are perfectly legitimate questions," Coleridge said, looking down at Bray from the judge's bench. "We have to explore these things."

Bray agreed his use of overseas trusts and advisory firms was confusing. There are reasonable explanations for the complexity, he argued, describing how he'd tried to use his finance skills to achieve the charity's goals. When an animal is "facing imminent extinction, then you swing for the fences," he said. "You make big bets, because if the bets pay off, you have the money to save them."

Judge Coleridge took until October 2014 to deliver a verdict. He ruled in Bray's favor, saying he'd seen nothing improper about the charity or the couple's actions, even those he'd initially seen as dishonest. The trust holding the Deutsche Bank money "was always, and is, only for the Chinese tigers." Whereas Bray's testimony was clear and consistent, Li "has become blinded by her desire for revenge," Coleridge said.

Li has since started her own charity, China Tiger Revival. In November 2015 she got permission from a panel of judges to appeal Coleridge's ruling. If she doesn't win the case, she says, she'll be left with nothing. Even the East London home she still shares with Bray is owned by Save China's Tigers. Li, her lawyers said in a statement, "wants

"THE WESTERN WAY— FRANKLY SPEAKING, WE DON'T THINK IT WILL WORK"

couple's operating expenses, which would have seemed modest at Deutsche Bank or Gucci, looked shocking when charged to a registered charity. The veteran judge, Sir Paul Coleridge, was incredulous. "This is a charity with people being asked to contribute money to it," he said. "It was incredibly dishonest."

"I was careful to ensure that outside money went to the tiger project," Li replied.

Li also alleged that Bray used the charity to shield his wealth from taxes. "What lies behind all this is Mr. Bray and Mr. Bray's control," Li's lawyer, Richard Todd, told the judge. The tiger project, he said, was going nowhere.

British newspapers found the story of the millionaire banker, his glamorous wife, and their endangered predators irresistible. "CLAWS OUT IN £50M SPLIT OF TIGER COUPLE," read one headline in the *Daily Mail*. "Tremendous damage has been done to the charity by the reporting of the hearings here," Bray complained to the judge.

He paced outside the courtroom during breaks. Asked by reporters for a way to contact him, he said he'd have to take legal advice before giving out his e-mail address.

Bray's day in court came in June 2014. He struggled to keep his cool during hours of cross-examination. "You are reading far too much into it," he shouted during one exchange, his black-rimmed glasses pushed up onto his head. "I'm sorry, I'm sorry." He rubbed his face with his hands. "Let me take a moment."

the courts to understand what is really going on in the financial superstructure built up around these tigers by her husband."

On the second day of the SFA's visit to the reserve, Zhang and Lu rise early to watch the tigers being fed. Although they mostly subsist on freshly shot game, they're learning to hunt. One of the males once killed an 1,800-pound eland and spent a week chewing on it. The tigers have also eaten aardvarks, baboons, and porcupines, and the mothers are passing these skills on to their cubs.

In Madonna's area, one of the rangers tosses a dead antelope over the fence. The tiger bounds up, snatches the animal by the neck, and carries it a few yards. She licks the fur off with her abrasive tongue, then bites into the rump. Within a few minutes, the bottom half of the antelope is a bloody mess. There's a crackling noise like burning twigs as Madonna bites through a leg bone. "That sound still gives me the shivers," says one of Bray's employees, Brad Nilson.

Bray poses for photos next to the feeding tiger. "I should make that my Tinder profile picture," he says later, back at the lodge.

His staff sets up a projector screen in the lounge so he can give a presentation to his Chinese guests, surrounded by tiger photos and big-cat-themed ornaments. Loss of biodiversity is a threat to all life on earth, Bray begins, and it's happening



TIGER 327 (ABOVE) DIED FIGHTING A RIVAL MALE IN 2011; DELTA (BELOW) DIED AFTER SUSTAINING AN INJURY HUNTING A BLESBOK IN DECEMBER



faster than at any point in human history. "We have to reverse this problem," he says, "not for me because I love tigers, but because I want the planet to remain habitable."

Bray describes a site in southwest China, the Qichong National Nature Reserve, as an ideal home for the tigers. It's primal forest, surrounded on three sides by mountains and a river, remote and sparsely populated, but with good enough transport links to support ecotourism, he says. He's signed a provisional agreement with local officials and is negotiating with the provincial government.

Zhang listens carefully before responding. More than a decade has passed since Chinese zoos first loaned Bray and Li their tiger cubs, Zhang says, and there's pressure to bring them home. The question is how. One option is to re-create Laohu in China so the animals can acclimate to a forested environment and then be released later—an interim location, in other words, at a modest size.

Bray frowns and cracks his knuckles. The suggestion is far short of his vision of tigers returning to a pristine wilderness. "At great personal cost, I've lived up to my commitments," he says.

"I expect China to do the same. Whether this was a silly folly or a successful project depends on what we end up with in China." His voice is getting louder. "I have to have a good ending for this."

Zhang replies calmly, "The Western way—frankly speaking, we don't think it will work in China."

Even if Bray could delay the tigers' return indefinitely, he's facing a bigger problem: At some point, the charity will run out of money. Bray says it has cash of about £5 million, and the revenue possibilities at Laohu are limited. One is game ranching—raising animals such as springbok and eland and selling them on South Africa's live game markets. A second is charging hunters to shoot such animals at Laohu. That might be controversial, given that hunting is what got the South China tiger into trouble in the first place, but Bray can live with it. "I wouldn't consider it unjust for me to make some money," he says. "I think the likelihood of me making the money back I put in is close to zero."

If the Chinese government won't pay for a reserve, the best remaining outcome might be to find a billionaire patron. Zhang and Lu keep talking about a potential backer named Su Zhigang, the chairman of Guangdong Chimelong Group, who's built a theme park empire in China. His company's attractions, including a circus, a drive-through safari, and the country's largest theme park, Chimelong Paradise, get millions of visitors every year. Recently he opened a \$5 billion island water park near Macau, a kind of Asian SeaWorld. Su is apparently interested in taking Bray's tigers.

Bray appears intrigued but says he needs to be convinced that Su would be a suitable partner. He's heard the name before but hasn't been able to contact the entrepreneur, and Zhang and Lu seem unwilling to arrange a meeting. But Bray understands that Su has two things he lacks: access to vast resources and clout in China. (Su didn't respond to several requests for comment.)

The argument over the tigers' fate, and who will pay for it, continues into the evening, as Bray and Zhang walk off to sit in near-darkness at an outdoor table. Above the sound of crickets and springbok steak sizzling on the barbecue, Bray can be heard shouting, "This is my legacy."

Bray's problems seem a long way off during a game-spotting drive on the final day of the officials' visit. The tigers are what conservationists call an umbrella species: The care lavished on them also benefits other creatures in the ecosystem. Raising exotic Asian tigers in Africa has turned a cluster of former sheep farms into a stunning habitat, albeit one surrounded by fences and managed by people. There are two wild cheetahs on the reserve, and a grassy plain is strewed with bleached bones from their kills. Springbok bounce alongside the truck, flouting gravity.

Bray bounces in his seat as one of the reserve managers, Heinrich Funck, steers along a rocky track. "I got involved gradually," Bray says, reflecting. "Suddenly I had 30,000 hectares."

Funck slows so his passengers can observe a lone oryx standing under the shade of a tree. "I would say it took over your life," he says.

Bray is silent for a moment. "Yes," he says. "It has." B
—With Feifei Shen

THE MOST DIFFI

WHY IT'S
SO HARD
TO OPEN AN
ABORTION
CLINIC—
AND WHY
SO MANY
ARE CLOSING



CULT BUSINESS

JULIE BURKHART

YOU COULD RUN

PHOTOGRAPH BY
ELINOR CARUCC BY

MEAGHAN WINTER



Hoping to publicize her new nonprofit, last fall Julie Burkhardt called her local NPR affiliate, KMUW in Wichita, about buying a day of sponsorship for \$480. Station manager Debra Fraser decided immediately that KMUW wouldn't allow it. "I didn't want to upset the apple cart," Fraser says.

The response wasn't new to Burkhardt. In April 2013 she had reopened and renamed Women's Health Care Services, where her former employer and mentor, Dr. George Tiller, provided abortions from the 1970s until 2009, when he was shot in the head and killed while ushering at his church. Today, South Wind Women's Center offers abortion and OB-GYN services as well as transgender care such as hormone therapy. Burkhardt hopes to install a birthing center. In the basement, Trust Women, the center's umbrella nonprofit, runs a political action committee, continuing the advocacy Tiller began in the 1980s.

"We are only asking to be treated like any other business that provides health care," Burkhardt wrote in a letter to KMUW appealing the station's rejection. She says a man in the development office told her that if the station accepted South Wind's sponsorship, it would have to accept sponsorship from anti-abortion organizations, too. "The fundraiser in me thought, What's the problem with that?" Burkhardt says with a laugh. But she was taken aback, she recalls, when he asked if she thought KMUW should also take donations from the Ku Klux Klan. About that, Fraser says: "I certainly would hope that no one on my staff would say that. That doesn't represent what I said to Julie."

Burkhardt and Fraser met for lunch. Fraser had previously worked at a Texas station where listeners frequently called to complain about Planned Parenthood's sponsorship. As a news organization reliant on listener support, KMUW couldn't afford to create the perception that it was "taking a stand" on abortion, Fraser says. "If I were you," she remembers telling Burkhardt, "I'd be really upset about this. But I can't help you."

The stigma around abortion prevents Burkhardt's nonprofit from performing many of the everyday transactions essential to businesses. She and other clinic owners have had trouble securing mortgages, medical insurance, contractors, and someone willing to deliver Band-Aids and bottles of water. Especially in rural and conservative regions, a wide range of companies and organizations decline to work with abortion providers, either for reasons of personal conscience or because of fears that being associated with abortion will cost them business.

In recent years states have enacted hundreds of laws designed by activists to make it more difficult—and more expensive—to perform abortions. Twenty-two states require abortion clinics to follow codes comparable to those of ambulatory surgical centers; at least 11 states specify the width of clinic rooms or hallways. Many clinics struggled to stay in the black well before legislation required them to remodel their corridors.

A common allegation by anti-abortion activists is that the doctors providing such services are in it for the money. "Their focus is where the dollar is. It's not protecting women," says Melissa Conway, a spokeswoman for Texas Right to Life. "Especially within the last few years, the cost of abortion services is increasing, and so it's a very profitable business." For many anti-abortion advocates, that standalone clinics provide most abortions is proof that "abortionists" are seedy characters who aim "to garner financial gain on the backs of women," as Conway puts it. Texas Right to Life and its parent

organization declined multiple requests for evidence that running an abortion clinic is lucrative.

The numbers suggest the opposite. The average amount paid for an abortion nationwide—about \$450 for the most common procedures—has been relatively stagnant for decades, despite inflation in other areas of medicine and higher costs. In the 1970s anti-abortion attorneys formed a decadeslong plan to craft and lobby for state regulations that would gradually strip away physicians' ability to provide the procedure. Much of the legislation makes it more expensive for clinics to operate, and the strategy has proved effective. Since 2011 at least 162 abortion providers have closed or stopped performing abortions, and 21 clinics have opened. That represents the steepest annual decline in the number of abortion providers ever, according to Bloomberg News. Burkhardt is working to start another clinic, in Oklahoma City, which she estimates will cost \$1 million. No one has opened an abortion clinic in Oklahoma since 1974.

In 1976, Congress passed the Hyde Amendment restricting the use of federal funds for abortion, which Americans United for Life helped defend before the Supreme Court in 1980. In 33 states, Medicaid can't be used to cover the procedure in most circumstances. Recent polling finds that almost half of women who obtain abortions live below the federal poverty line. Meanwhile, 10 states, including Kansas and Oklahoma, ban all insurance plans—and 25 states restrict government marketplace plans—from covering abortion except in rare circumstances. With a large share of women, including the poorest patients, paying out of pocket, many abortion providers keep their prices low. "What you're doing is—as much as you can—not pricing people out of getting this service," says David Burkons, a physician who opened a clinic in Ohio last year.

Clinic directors say the political climate has made it almost impossible to open clinics. "You'd think, This is crazy," says Amy Hagstrom Miller, founder and chief executive officer of Whole Woman's Health, which has acquired or opened clinics in five states since 2003. She's the plaintiff in the coming Supreme Court case over abortion laws that have shuttered two of her five Texas locations. Arguments begin on March 2. The extra costs she and other providers face are at the heart of the case: The decision will largely come down to whether the justices think the laws have made it too expensive for clinics to operate—and to what extent that burdens patients. Says Hagstrom Miller: "This is probably the most difficult business you could ever run."

South Wind is the only abortion clinic for at least 150 miles in any direction. The two other abortion providers in Kansas are a Planned Parenthood affiliate and a private practice in Overland Park, almost 200 miles away. Because there are so few places to get an abortion in the region, patients often come from Oklahoma,

**BURKHART WITH TILLER (LEFT)
IN WASHINGTON AT THE MARCH
FOR WOMEN'S LIVES IN 2004**



SHUT OUT

Abortion access in the U.S.
has been vanishing in recent years.

—Esmé E. Deprez
and Evan Applegate

Reasons provider stopped offering
abortions since 2011

- Legislation
- Business decision
- No doctor available
- Unfit provider
- Hostile climate
- Unknown/other

New abortion
providers since 2011

Urban area

California lost a dozen providers, showing that availability has decreased even in states led by abortion-rights-friendly Democrats.

State rules that make it too expensive or logistically impossible to remain in business drove most of Texas' closings—at least 30. The regulations, passed in 2013, are the subject of a U.S. Supreme Court case.

All 14 clinics that stopped offering abortion in Iowa were operated by Planned Parenthood, which attributes the drop to changing demographics and industry consolidation.

162 providers closed since 2011
19% of closures were in counties with fewer than 100,000 people

30.5M women age 15-44 live within 25 miles of the shuttered providers

21 providers opened

Among Michigan's lost providers were at least two deemed unfit to practice.

Missouri joined a handful of states where only one clinic remains in business.

Missouri, and Texas. Every week, Burkhart flies in a physician willing to perform second-trimester abortions. South Wind spends about \$20,000 on airfare annually, and sometimes patient and doctor travel across state lines to meet at South Wind.

Set on a service road in a working-class neighborhood, the clinic is squat, windowless, and surrounded by a tall cedar fence “like a bunker,” as one staff member says. After a makeover by a donor, the waiting room looks like an upscale therapist’s office. Neutral-toned chairs face a painting of irises. The lights are dimmed. The soothing atmosphere is meant to counteract everything patients pass through to get there.

At the mouth of the parking lot, Kansas Coalition for Life protesters record each visitor’s license plate number and time of entry and track which car belongs to each staff member. On a morning in October, they wait beside a banner that says “Every abortion is a cruel and barbaric act of violence” and shows a mutilated, unclothed man in a Christlike pose. Nearby is a trailer covered with a giant photograph of a fetus. After an armed security guard opens the locked door, he instructs visitors to empty their purses and walk through a metal detector. Burkhart estimates South Wind spends a minimum of \$45,000 on security each year.

In her office, Burkhart gets off the phone with her attorney and makes another pot of coffee. She’s tall and makes matter-of-fact statements in a flat timbre. Raised by a feminist mother (“listening to *Free to Be... You and Me*”), Burkhart, 49, first interned at an abortion clinic as a college student. A

family tragedy interrupted her plans to go to medical school, so she’s divided her career between reproductive-rights work and other political advocacy. She ran Tiller’s PAC for seven years.

South Wind is expanding to Oklahoma because the doctor at one of the two remaining abortion clinics in the state is old enough to retire. Since states such as Kansas and Oklahoma prohibit publicly funded entities from performing most abortions, local hospitals can’t train the next generation to replace aging doctors. Nationwide, medical schools don’t offer abortion training. All OB-GYN residencies are supposed to offer access to abortion training, but a 2013 survey published in the journal *Contraception* found that not all do.

OB-GYNs who do receive training rarely end up offering abortions once they’re in practice, often because their workplaces don’t allow it. In the U.S., 9 of 10 abortions are first-trimester procedures that are medically simple enough to be done in a doctor’s office at little expense. Across the country, though, anti-abortion groups have protested and led boycotts against OB-GYNs who offer abortions; even when their doctors are pro-abortion rights, gynecology practices usually decide against offering the procedure to avoid jeopardizing their business. And hospitals are also risk-averse: They perform just 4 percent of the country’s abortions. Many are prohibited by mandates from the religious institutions that run them or local governments. Others have little incentive to wade into divisive politics. When insurance does reimburse for abortion, the rates are usually low, says Lori Freedman, author of the ➔

As a result, clinics perform 94 percent of abortions in the U.S. Planned Parenthood is the single largest provider, but the majority of clinics, like South Wind, are independent nonprofits or small businesses. To function, they must contend with standards that vary from state to state. Advocacy organizations including Americans United for Life and National Right to Life have spent 40 years drafting and lobbying for rules that make operating abortion clinics highly difficult, such as the requirement that the clinics meet surgical center standards.

Ambulatory surgery centers, or ASCs, are expensive to build and maintain. Their guidelines are written for procedures that require operating rooms, so specialists must be hired to set up heating, ventilation, air conditioning, and electrical systems that are more complicated than those in clinics. It's the difference between buying a Ferrari and a Volvo, according to one architect who designs ASCs but doesn't want to be named because some of his clients are opposed to abortion. The surgery centers are required to have a separate source of electricity in case of an outage, and generators can cost \$50,000 apiece. In Oklahoma, where labor and materials are relatively cheap, building a clinic would cost about \$175 per square foot; an ASC would run about \$258. The architect says that on average, a single 300-square-foot operating room costs about \$1 million, land excluded. Equipment generally costs an additional \$500,000 per OR.

Oklahoma has no ASC requirement. But in July, Burkhart submitted an application to the state to open one, because she wanted to provide abortions up to the legal limit of 24 weeks of pregnancy. The lot and building—a former optometry practice—cost \$300,000. Renovations required an additional \$550,000.

Burkhart's architect (not the one who compared surgery centers to Ferraris) was ready to start demolition but was stalled waiting for a license from the state.

In late August, Burkhart finally heard back. The Oklahoma State

Department of Health sent her a letter saying the state wouldn't allow abortions to be performed in a surgery center. Burkhart and her lawyers resubmitted their applications. "Now they're saying you can't do abortions in a more highly regulated environment?" Burkhart says in October. "I already have invested in this project—just cash, well over \$100,000." She checks her e-mail again, hoping to find a message from the health department, which said she'd get word by that day. "We're on pins and needles," she says.

In December, Burkhart received initial approvals, and demolition began. Construction started in January. If all goes according to plan, the state will inspect the site twice in the coming months, and the clinic will be open by summer.

The American Medical Association and the American Congress of Obstetricians and Gynecologists have filed legal briefs in the coming Supreme Court case calling ASC requirements unnecessary and illogical.

In 2013, Texas required that abortions be performed in ambulatory surgery centers. A spokeswoman for Whole Woman's Health says it called every ASC in Texas asking if it could rent their space after-hours. All 250 declined. The monthly overhead for operating its single ASC in Texas runs \$40,000 higher per month than a standard clinic. In 2015 the company opened a clinic in New Mexico to serve the women of West Texas.

In Ohio, Burkons was the only OB-GYN to open a clinic providing surgical abortions in at least the past five years. When he began performing abortions at Northeast Ohio Women's Center in August, it was after 18 months of back-and-forth with the Ohio Department of Health, which he estimates cost him about \$100,000. Burkons has been practicing medicine since 1973. In 2013 he decided to take over a clinic closing in Cuyahoga Falls that included a surgery center. Burkons started paying the building's \$2,500 monthly rent and took out malpractice insurance. A colleague from another clinic advised hiring a consultant to help him pass the state inspection required of all ASCs when they reopen under new management. "I thought, Eh, I don't need it. We know what's wrong, and we'll fix it. Why spend the money?" Burkons says. "I had been working in the abortion field. I was well-versed in it. I was very naive in figuring that [the Department of Health] is a state agency and they're going to treat you fairly."

Ohio Department of Health documents obtained by Burkons's attorney show that 33 other health-care facilities that applied for licenses from 2011 to 2015 waited a median of about 15 days between being inspected and receiving a license or a plan of correction that led to a license. Five months after his inspection and pressure from his attorneys, whose \$400-per-hour rates quickly added up to about \$15,000, the Ohio Department of Health told Burkons that because of six violations, it was denying his license. According to a list of ASC license requests issued by the state, all seven of the other surgical centers cited for violations from 2011 to 2015 were not denied and were allowed to make immediate corrections.

Burkons attributes the heightened scrutiny to politics: In 2012, Governor John Kasich appointed Ohio Right to Life's president, Michael Gonidakis, a lawyer with no medical background, to the state's medical board, which oversees physician licenses. Katherine Franklin, a spokeswoman for Ohio Right to Life, says that in 2013 her organization, with Gonidakis at the helm,

**"WE DO
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ONE OF TWO SURGICAL
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WIND WOMEN'S CENTER
IN WICHITA



successfully lobbied the University of Toledo Medical Center to decline Burkons's admitting privileges—a new state requirement for physicians performing abortions. But Gonidakis's position on the state medical board wouldn't have affected a physician's application to provide abortions, Franklin says.

After the license was denied, Burkons reapplied. Before the second inspection, he hired consultants for \$12,000. They recommended going overboard; if the guidelines called for three smoke alarms, they advised having six. When the state inspectors were done, Burkons says, they told him, "We're going to submit there are no violations. Normally you'll have your license within two or three weeks. This isn't normal. Good luck." Five months later, in July 2015, Burkons found out he'd been granted his license from an acquaintance, who'd read the news on the Ohio Right to Life website. "There were many days when I would think, What the heck did I do this for?" he says. But providing abortion care is gratifying, because every patient "comes in with a problem and leaves without a problem," Burkons says. "Where else in medicine can you, multiple times a day, change a woman's life in five minutes?"

Government regulation is one obstacle to clinics' providing abortions, but the private sector presents others. Nonprofits have swooped in to subsidize abortion care in the absence of public funds; to stay competitive, for-profits must mirror nonprofit prices. At many clinics, a patient interacts with an administrator, nurse, sonographer, counselor, and physician—during each of at least two visits in 13 of the states with mandatory waiting periods—all for just a few hundred dollars. Hagstrom Miller says Whole Woman's Health operates at a 1 percent or 2 percent profit or at a loss. "We have made it next to impossible to keep our doors open just from patient receipts," she says. "In some ways, we've done that to ourselves by being so committed to the social justice and human-rights part of our work and knowing the women we serve can't afford those fees."

When Burkhart opened South Wind, she raised enough in donations to renovate the facility but still needed a line of credit for everything else. "I spent two years talking to different financial institutions," she says. "I went from small, very local banks to regional banks to Bank of America, Wells Fargo." Lenders may have rejected Burkhart's loan applications because of abortion stigma or legitimate financial concerns; it's often hard to disentangle the two. (In an e-mail, a Wells Fargo spokesman said the bank can't share customer information; a Bank of America spokes-

woman said in an e-mail that the bank had no information on South Wind.) A clinic director in the South, who asked not to be identified for fear of harassment, says that

when she applied for a loan, a bank representative asked her if the state was going to pass laws that would close her practice.

South Wind almost breaks even, taking in about \$1 million a year. In addition to construction, staffing is a major cost for clinics. For her Oklahoma City location, Burkhart anticipates hiring four administrators, two or three doctors, and five or six other medical personnel. The market rate for a nurse in Oklahoma City is \$60,000; a local OB-GYN on average makes \$250,000. Still, Burkhart says, "On paper, we look pretty good." She hoped that running the Wichita clinic debt-free would make financing the Oklahoma clinic easier, but it took a year to find a regional bank willing to provide a loan for one-third of the construction costs. She won't name the bank. "I don't want them to have to undergo any conflict," she says.

Burkhart isn't paranoid. Anti-abortion organizations closely monitor and publicize local businesses' dealings with abortion clinics. One such group is Wichita-based Operation Rescue, whose work, according to its website, is "taking direct action to restore legal personhood to the pre-born and stop abortion in obedience to biblical mandates." Says its president, Troy Newman: "We do everything legal and moral to make sure these abortion clinics aren't able to open up. We'll talk to landlords. We'll talk to neighbors. We'll send postcards out asking not to rent, lease, or sell to an abortionist." Conway, of Texas Right to Life, says that when anti-abortion organizations in her state "hear a rumbling" about an abortion clinic coming to town, activists will go to the local permit office "almost on a daily basis" until documents with contractors' names are available. Then they blast the contractors with phone calls and organize boycotts.

Kansas Coalition for Life protesters disseminate any names they see printed on the vehicles in South Wind's lot. The day Burkhart's architect accepted the job at South Wind, he disabled his home answering machine; he'd received angry calls from across the country.

A clinic director in the South says she spends untold hours dealing with problems that would be easy to solve if local businesses were willing to work with her. She taught herself to repair a hydraulic bed because no local handyman would come by. Whole Woman's Health has a full-time staffer designated for wrangling vendors. When it opened the clinic in New Mexico, the phone company installer repeatedly stood up the staff for three months. Lamar Billboards rescinded a contract to sell Whole Woman's Health ad space explicitly because the company provides abortions, says Fatimah Gifford, a spokeswoman for Whole Woman's Health. (Lamar declined several requests for comment.)

None of these obstacles by themselves is enough to prevent a clinic from providing abortions, but their cumulative effect can shutter clinics by raising the difficulty and cost of doing business to unsustainable levels. "If anybody asked me, 'Should I try this?' I'd probably tell 'em no," Burkons says. ■

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A man and a woman are dancing joyfully in a colorful, abstract setting. The woman, on the left, has long dark hair and is wearing a yellow ribbed top, a black and white patterned skirt, and a light brown trench coat. She is wearing yellow pointed-toe pumps. The man, on the right, is wearing a blue plaid shirt, a brown suede jacket, tan pants, and white sneakers. He is captured in mid-dance with his arms raised and mouth open. The background features stylized classical columns and geometric shapes in shades of purple, yellow, and blue.

Spring Fashion

2016

Ready to break out of
your winter rut?
Take our quiz to learn how

OK, here are the rules: We'll ask a question, and there are three possible answers—A, B, or C. Based on those responses, you can figure out what type of dresser you are. But don't stress. No matter what you decide, we've got a way for you to be the best version of yourself. Ready? Sharpen those pencils.

Denim is...



A My uniform

Lighter-weight denim flows like any shirting fabric, so don't be afraid to treat it that way. (Do be afraid of the Canadian tuxedo—that's still not OK.)



Gabriela Hearst dress,
\$1,495; barneys.com. Dries Van
Noten necklace, price on
request; barneys.com. Pierre
Hardy shoes, \$895; Pierre
Hardy, 30 Jane St., New York

B My indulgence

Indigo can be a
refreshing alternative
to spring's never-
ending procession
of navy.



Brunello Cucinelli
jacket, \$2,375, and pocket
square, \$180;
Brunello Cucinelli,
136 Greene St., New York.
Topman shirt,
\$40; us.topman.com.
The Tie Bar tie,
\$19; thetiebar.com

Jil Sander Navy,
\$250;
jilsandernavy.com



C Fine—for the weekend!

Weaving atypical washes
into your wardrobe
might change your mind.

Pierre Hardy, \$595;
Pierre Hardy,
30 Jane St., New York

When you see a guy with a messenger bag, you think...



Sustainability Becomes More Than a Buzzword

In 2015 major manufacturers from H&M to Kering, the conglomerate behind luxury brands such as Brioni and Bottega Veneta, responded to charges that their businesses were taking a toll on the environment. They streamlined supply chains and marketed "conscious" collections. But when it comes to sustainability, there's real passion among smaller brands—and there are new companies worth knowing about as much for how they make it as what they

make. Shirting-inspired dresses and trousers from New Zealand's **Kowtow** (kowtowclothing.com) come from fair-trade organic cotton. **Amour Vert's** (amourvert.com) soft tees and blouses use sustainable synthetics like Tencel and recycled polyester—Gwyneth Paltrow is a fan. And **Melissa Joy Manning** (melissajoymanning.com) crafts her jewelry from recycled sterling silver, even designing some pieces around gemstones from a Michigan ore refinery.

Which decade do you wish you lived in?

A

The 2020s! Never look back

Minimalist detailing says "the future" without verging into sci-fi territory.



Jil Sander dress, \$2,010; store.jilsander.com. Adam Lippes shirt, \$490; brownsfashion.com. Jennifer Fisher earrings, \$225; jenniferfisherjewelry.com. Malcolm Bett bracelet, \$2,855; malcolmbeetts.com. Marni shoes, \$950; Marni boutiques

B

It would be a whole lot better if this were the '70s, man

Don't go full retro—keep your lapels well under a mile wide, and opt for pants in slimmer cuts than you'd have worn back in the bell-bottom days.

Tie One On

The neckerchief is a global style signature. Wrap a silky one around your neck (like this one from Karen Walker, price on request; karenwalker.com) and look convincingly Parisian, or try a cotton bandanna and look convincingly chic whatever city you're in.



Karen Walker sweater, \$325; karenwalker.com.
 J.Crew pants, \$98; jcrew.com. Missoni scarf, \$450; missoni.com. Gabriela Hearst shoes, \$795; barneys.com



I like Ike

Fifties fashion doesn't have to be as boring as a TV dinner. Balance conservative silhouettes with eye-catching prints.

Officine Generale jacket, \$1,455; mrporter.com. Marni shirt, \$585; Marni boutiques. Tod's pants, \$495; Tod's boutiques. Christian Louboutin shoes, \$895; us.christianlouboutin.com



Hardy Amies jacket, \$995; hardyamies.com. Orlebar Brown pants, \$245; orlebarbrown.com. Michael Bastian pocket square, \$60; michaelbastiannyc.com. Johnston & Murphy shoes, \$395; johnstonmurphy.com

Equipment shirt, \$218; equipmentlfr.com. Banana Republic skirt, \$128; bananarepublic.com. Jimmy Choo shoes, price on request; jimmychoo.com

When you put your best foot forward, what does it look like?



Custom Clothing Reaches Critical Mass

The boom in affordable bespoke fashion is finally moving beyond men's suiting and shirting. Sweden's **Tailor Store** (tailorstore.com) sells tailor-made shirts for women, and startup **Bow & Drape** (bowanddrape.com) will sew a cheeky slogan of your own design—"Whiskey me away," say—in sequined letters onto a sweatshirt or tote.

British shoppers can personalize a knitwear pattern at **Unmade** (unmade.com)—the company wants to ship to the U.S. soon. There's also footwear, such as made-to-measure ballet flats from **Margaux** (margauxny.com) and customer-designed dress shoes for men from **Awl & Sundry** (awlandsundry.com).



Are you a risk taker?

Shorts in tailored suiting fabrics that kiss the top of your knee (no cargos) will keep you looking and feeling cool.

A

My middle name is Danger

Dare to bare your shoulders. It's an elegant way to show some skin.

Theory shirt, \$275; theory.com.
Billy Reid shirt, \$495; billyreid.com.
Catbird necklace, \$148; catbirdnyc.com.
Altuzarra shoes, \$795; net-a-porter.com

The trick with looser, pleated pants is to make sure they taper slightly at the ankle.

Hardy Amies jacket, \$995; hardyamies.com. Hamilton shirt, \$345; hamiltonshirts.com. Tommy Hilfiger shorts, \$89.50; tommym.com. Ted Baker London pocket square, \$25; nordstrom.com. Berluti shoes, \$1,320; berluti.com

All Grown-Up

Backpacks aren't just for schoolchildren anymore. This version from Want Les Essentiels (\$595; wantlesessentials.com) does away with adolescent adornments; it's compact, minimal, and utilitarian-chic.

The pack comes in plain black leather and intricate brocade, among other fabrics. This one features the brand's signature paint-drip polka dots.



B

Let's not get carried away

With so much volume concentrated around the paper-bag waist, you'll want to keep your top and shoes simple.

Brock Collection shirt, \$790; A'marie's Newport Beach. Tibi skirt, \$395; tibi.com. Jennifer Fisher necklace, \$1,235; jenniferfisherjewelry.com. Jimmy Choo shoes, \$595; us.jimmychoo.com

Bonobos shirt, \$98; bonobos.com. Boglioli pants, \$320; boglioli.it. Barneys New York shoes, \$495; barneys.com



Billowing sleeves give off a whimsical vibe, but they're still work-appropriate.

Jill Stuart shirt, \$428; jillstuart.com. Sea skirt, \$315; nordstrom.com. Maryam Nassir Zadeh shoes, \$391; mnzstore.com



J.Crew shirt, \$69.50, and pants, \$158; jcrew.com. W.Kleinberg belt, \$155; wkleinberg.com. Johnston & Murphy shoes, \$145; johnstonmurphy.com

The short-sleeved button-front shirt is no longer only for the office IT guy. Designers are reinterpreting it with slightly shorter, tighter arms—in colors beyond blue and white.

C

I don't gamble

A

Not something I worry about

Green is the new navy. That said, it can be tricky to wear. Avoid looking like a leprechaun by hewing to bluer and browner shades.

From peach to coral, orange tones are everything this spring. Pick one standout piece to get started if head-to-toe is too much.



74

Steven Alan coat, \$495; stevenalan.com.
Burberry suit, \$2,390; us.burberry.com.
New Balance for J.Crew shoes, \$75; jcrew.com

Altuzarra jacket, \$2,995, and skirt, \$1,295; [Neiman Marcus stores](http://neimanmarcus.com). Walt Cassidy Studio for Derek Lam earrings, \$450; dereklam.com. Jennifer Fisher rings, \$325 to \$435; jennifertfisherjewelry.com. Christian Louboutin shoes, \$675; christianlouboutin.com

How much color is too much color?



Top a slip dress in delicate blush with a trench-style coat to keep the look from getting too bedroom-y.

Tibi coat, \$950; tibi.com. Ulla Johnson dress, \$460; ullajohnson.com. Jennifer Fisher earrings, \$385, and bracelet, \$1,225; jenniferfisherjewelry.com. Hermès shoes, \$780; hermes.com



B

I can handle a hint—kind of

Take baby steps: As temperatures rise, swap out charcoal gray for lighter shades—think the color of the sky after it rains.



Ermenegildo Zegna suit, \$3,095; select Ermenegildo Zegna boutiques. Brunello Cucinelli shirt, \$595; Brunello Cucinelli boutiques. Johnston & Murphy shoes, \$155; johnstnrmurphy.com

C

Turn it off, please!

Pair a flowing poet blouse with a structured pencil skirt. The tie neck lets you decide how much skin you want to show.



Michael Kors shirt, \$875; michaelkors.com. Hellessy skirt, \$780; hellessy.com. Andra Neen necklace, \$535; andraneen.com. Stuart Weitzman shoes, \$435; Stuart Weitzman, 625 Madison Ave., New York

Bombing Run

Everyone loves bomber jackets because of their versatility. Wear one over a shirt and tie to stylize your workweek wardrobe, or with your favorite T-shirt and jeans on the weekend. This one from Todd Snyder + Champion (\$405; toddsnyder.com) is a men's coat, but it could also be a sporty balance to spring's Victorian florals.



White and khaki are often a preppy combo, but this topcoat makes the pairing thoroughly modern.



Michael Kors coat, \$495; michaelkors.com. Hermès suit, \$3,950; hermes.com. Officine Generale shirt, \$265; nmrporter.com. Greats shoes, \$195; greats.com

Time to tally your responses.

If you answered...

Mostly
A

You're not shy about making a bold statement. How you dress is a big part of what gives you your edge. And you get that being part of fashion's vanguard requires constant vigilance—there's no rest for the style-obsessed.

Still, take a step back and look at your wardrobe with fresh eyes. You'll start seeing colors you may have been blind to. You'll find that denim can go way beyond just jeans. You may even decide that, come summer, your new favorite pants aren't pants in the traditional sense of the word.

The good news is, you have great taste. But you're a bit tentative about really going for it. For you, a sartorial hop is a full-blown sartorial leap.

Wearing a light gray suit instead of a charcoal one is progress—one small step for man. But inside every B is an A just waiting to come out. Be a little more adventurous: Go for a loafer with a colorful sole; bust out your old suede jacket. You don't have to remake your whole closet so it looks like it came right off the runway, but spring is the season of renewal. Live a little.

Mostly
C

Mostly
B

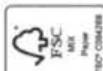
You subscribe to the theory of "To thine own self be true." Which isn't the worst way to go through life, but it might leave you kind of boxed in when it comes to what you wear.

There's nothing wrong with taking a classic approach; by definition, it will stand the test of time. In sticking to your code, though, you might miss out on some of the fun. Use the next few months to experiment: with colors, with accessories, and with updating some of your standards. Not everything you try will be better than your usual—but, hey, it's worth a shot.

From first page, on him: Simon Miller jacket, \$1,840; simonmillerusa.com. Ermenegildo Zegna shirt, \$375; select Ermenegildo Zegna boutiques. J.Brand pants, \$176; nordstrom.com. W.Kleinberg belt, \$155; wkleinberg.com. Greats shoes, \$159; greats.com. On her: Trademark coat, \$598; trade-mark.com. Zara shirt, \$15.90; zara.com. Miu Miu skirt, \$1,200; miu-miu.com. Jennifer Fisher rings, \$215 to \$340; jenniferfisherjewelry.com. Catbird rings, \$64; catbirdnyc.com. Christian Louboutin shoes, \$675; christianlouboutin.com

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